```
=> fil hcapl; d que l12; fil wpids; d que l61; fil medl; d que l72
FILE 'HCAPLUS' ENTERED AT 16:08:28 ON 02 JUL 2001
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.
COPYRIGHT (C) 2001 AMERICAN CHEMICAL SOCIETY (ACS)
```



```
FILE COVERS 1947 - 2 Jul 2001  VOL 135 ISS 2
FILE LAST UPDATED: 1 Jul 2001  (20010701/ED)

 This file contains CAS Registry Numbers for easy and accurate
 substance identification.

 This file supports REGlstRY for direct browsing and searching of
 all substance data from the REGISTRY file.  Enter HELP FIRST for
 more information.

HCAplus now provides online access to patents and literature covered
in CA from 1947 to the present.  On April 22, 2001, bibliographic
information and abstracts were added for over 2.2 million references
published in CA from 1947 to 1966.



L1        23092 SEA FILE=HCAPLUS ABB=ON  G PROTEIN-COUPLED RECEPTORS+NT/CT
L2         2615 SEA FILE=HCAPLUS ABB=ON  G PROTEIN-COUPLED RECEPTORS+OLD/CT
L3        14691 SEA FILE=HCAPLUS ABB=ON  SCREENING/CW
L4          346 SEA FILE=HCAPLUS ABB=ON  (L1 OR L2) AND L3
L5        35567 SEA FILE=HCAPLUS ABB=ON  AGONIST#/OBI
L7        39292 SEA FILE=HCAPLUS ABB=ON  G PROTEIN#
L9        65178 SEA FILE=HCAPLUS ABB=ON  ANTAGONIST#/OBI
L10          24 SEA FILE=HCAPLUS ABB=ON  (L5 OR L9)(L)L7 AND L4
L12          16 SEA FILE=HCAPLUS ABB=ON  L10 AND PHARMAC?/SC,SX



FILE 'WPIDS' ENTERED AT 16:08:28 ON 02 JUL 2001
COPYRIGHT (C) 2001 DERWENT INFORMATION LTD

FILE LAST UPDATED: 28 JUN 2001              <20010628/UP>
MOST RECENT DERWENT UPDATE            200136   <200136/DW>
DERWENT WORLD PATENTS INDEX SUBSCRIBER FILE, COVERS 1963 TO DATE

>>>  SDI'S MAY BE RUN ON EVERY UPDATE OR MONTHLY AS OF JUNE 2001.
     (EVERY UPDATE IS THE DEFAULT). FOR PRICING INFORMATION
     SEE HELP COST <<<

>>> D COST AND SET NOTICE DO NOT REFLECT SUBSCRIBER DISCOUNTS -
                                                SEE HELP COST <<<

>>> FOR UP-TO-DATE INFORMATION ABOUT THE DERWENT CHEMISTRY
    RESOURCE, PLEASE VISIT
         http://www.derwent.com/chemistryresource/index.html <<<

>>> FOR DETAILS OF THE PATENTS COVERED IN CURRENT UPDATES,
    SEE http://www.derwent.com/covcodes.html  <<<
```

```
L55          369 SEA FILE=WPIDS ABB=ON  G PROTEIN COUPLED(2A)RECEPTOR#
L56       134078 SEA FILE=WPIDS ABB=ON  ?AGONIST? OR MODULAT?
L57         2968 SEA FILE=WPIDS ABB=ON  INTRACELLULAR OR INTRA CELLULAR
L58       123967 SEA FILE=WPIDS ABB=ON  LOOP#
L59          286 SEA FILE=WPIDS ABB=ON  L55 AND L56
L61            9 SEA FILE=WPIDS ABB=ON  L59 AND L57 AND L58


FILE 'MEDLINE' ENTERED AT 16:08:29 ON 02 JUL 2001

 FILE LAST UPDATED: 25 JUN 2001 (20010625/UP).  FILE COVERS 1958 TO DATE.

 On April 22, 2001, MEDLINE was reloaded.  See HELP RLOAD for details.

 MEDLINE now contains new records from the former NLM HEALTH STAR
 database.  These records have an Entry Date and Update Date of 20010223.

 MEDLINE thesauri in the /CN, /CT, and /MN fields incorporate the
 MeSH 2001 vocabulary.  Enter HELP THESAURUS for details.

 The OLDMEDLINE file segment now contains data from 1958 through 1965.
 Enter HELP CONTENT for details.

 Left, right, and simultaneous left and right truncation are available in the
 Basic Index.  See HELP SFIELDS for details.

 THIS FILE CONTAINS CAS REGISTRY NUMBERS FOR EASY AND ACCURATE
 SUBSTANCE IDENTIFICATION.


L62          5044 SEA FILE=MEDLINE ABB=ON  G PROTEIN COUPLED(2A)RECEPTOR#
L63        562894 SEA FILE=MEDLINE ABB=ON  ?AGONIST? OR MODULAT?
L64           421 SEA FILE=MEDLINE ABB=ON  L62(5A)L63
L65         16666 SEA FILE=MEDLINE ABB=ON  DRUG EVALUATION, PRECLINICAL/CT
L66             1 SEA FILE=MEDLINE ABB=ON  L64 AND L65
L69         33334 SEA FILE=MEDLINE ABB=ON  RECEPTORS, CELL SURFACE/CT
L70         21750 SEA FILE=MEDLINE ABB=ON  G PROTEIN#
L71          1522 SEA FILE=MEDLINE ABB=ON  L69 AND L70
L72             1 SEA FILE=MEDLINE ABB=ON  L66 AND L71


=> fil embase; d que 182
FILE 'EMBASE' ENTERED AT 16:08:34 ON 02 JUL 2001
COPYRIGHT (C) 2001 Elsevier Science B.V.  All rights reserved.

 FILE COVERS 1974 TO 28 Jun 2001 (20010628/ED)

 EMBASE has been reloaded. Enter HELP RLOAD for details.

 This file contains CAS Registry Numbers for easy and accurate
 substance identification.


L79          1003 SEA FILE=EMBASE ABB=ON  G PROTEIN COUPLED RECEPTOR/CT
L80         58030 SEA FILE=EMBASE ABB=ON  DRUG SCREENING/CT
L81          9206 SEA FILE=EMBASE ABB=ON  SCREENING TEST/CT
L82            13 SEA FILE=EMBASE ABB=ON  L79 AND (L80 OR L81)
```

=> dup rem l72,l12,l82,l61
FILE 'MEDLINE' ENTERED AT 16:08:48 ON 02 JUL 2001

FILE 'HCAPLUS' ENTERED AT 16:08:48 ON 02 JUL 2001
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.

FILE 'EMBASE' ENTERED AT 16:08:48 ON 02 JUL 2001

FILE 'WPIDS' ENTERED AT 16:08:48 ON 02 JUL 2001

PROCESSING COMPLETED FOR L72
PROCESSING COMPLETED FOR L12
PROCESSING COMPLETED FOR L82
PROCESSING COMPLETED FOR L61
L83 39 DUP REM L72 L12 L82 L61 (0 DUPLICATES REMOVED)
ANSWER '1' FROM FILE MEDLINE
ANSWERS '2-17' FROM FILE HCAPLUS
ANSWERS '18-30' FROM FILE EMBASE
ANSWERS '31-39' FROM FILE WPIDS

=> d ibib ab l83 1-39

L83 ANSWER 1 OF 39 MEDLINE
ACCESSION NUMBER: 94173880 MEDLINE
DOCUMENT NUMBER: 94173880 PubMed ID: 8127853
TITLE: Creation and functional screening of a multi-use peptide library.
AUTHOR: Jayawickreme C K; Graminski G F; Quillan J M; Lerner M R
CORPORATE SOURCE: Department of Internal Medicine, Boyer Center for Molecular Medicine, Yale University School of Medicine, New Haven, CT 06536-0812.
SOURCE: PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF THE UNITED STATES OF AMERICA, (1994 Mar 1) 91 (5) 1614-8.
Journal code: PV3; 7505876. ISSN: 0027-8424.
PUB. COUNTRY: United States
Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 199404
ENTRY DATE: Entered STN: 19940420
Last Updated on STN: 20000303
Entered Medline: 19940411

AB Studies of functional interactions between transmembrane proteins such as **G-protein**-coupled receptors and ligands would benefit from the ability to utilize synthetic molecule libraries. This is realized here by the construction and application of a multi-use combinatorial peptide library (MUPL). Peptides are liberated from their supports in a dry state so that the problem of signal interference due to mixing of peptide molecules, particularly agonists and antagonists, is avoided. In addition, the peptides are released from their supports in a controlled manner so that fractions are available for multiple independent tests, thus eliminating the need for iterative library analysis and resynthesis. The MUPL concept was validated with a functional screen which detects **agonists** to **G-protein-coupled receptors** and led to the discovery of new ligands. It is expected that combining MUPLs with functional assays will enhance both basic scientific research and the rates of drug discovery and development.

L83 ANSWER 2 OF 39 HCAPLUS COPYRIGHT 2001 ACS
ACCESSION NUMBER: 2001:338856 HCAPLUS
DOCUMENT NUMBER: 134:349021
TITLE: cDNA encoding human AXOR35, a G-protein coupled receptor and its use for the treatment of diseases
INVENTOR(S): Aubart, Kelly M.; Bergsma, Derk J.; Fitzgerald, Laura R.; Graybill, Todd L.; Li, Xiaotong; Michalovich, David; Morrow, Dwight M.; Zhu, Yuan
PATENT ASSIGNEE(S): SmithKline Beecham Corporation, USA; SmithKline Beecham PLC
SOURCE: PCT Int. Appl., 54 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001033221	A1	20010510	WO 2000-US29461	20001026

W: CA, JP, US
RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE
PRIORITY APPLN. INFO.: US 1999-431898 A 19991102
US 2000-497790 A 20000203

AB Cloning of cDNA sequences encoding human G-protein coupled receptor AXOR35 and methods for producing such polypeptides by recombinant techniques are disclosed. Also disclosed are methods for utilizing AXOR35 polypeptides and polynucleotides in diagnostic assays. Such polypeptides and polynucleotides are of interest in relation to methods of treatment of certain diseases such as allergies and allergic disorders including asthma. In a further aspect, the invention relates to methods for identifying agonists and antagonists (e.g., inhibitors) using the materials provided by the invention, and treating conditions assocd. with AXOR35 imbalance with the identified compds. In accordance with another aspect of the present invention there are provided methods of screening for compds. which bind to and activate the AXOR35 (receptors) of the present invention (called agonists), or inhibit the interaction of the AXOR35 with receptor ligands (called antagonists).

REFERENCE COUNT: 3
REFERENCE(S): (1) Birren; Homo sapiens chromosome 18 1999
(2) Bonner; Science 1987, V237, P527 HCAPLUS
(3) Elshourbagy; US 6071722 A 2000 HCAPLUS

L83 ANSWER 3 OF 39 HCAPLUS COPYRIGHT 2001 ACS
ACCESSION NUMBER: 2000:645870 HCAPLUS
DOCUMENT NUMBER: 133:217704
TITLE: Small molecules having GLP-2 like activity, and their therapeutic use
INVENTOR(S): Lee, David K. H.; Treasurywala, Adi
PATENT ASSIGNEE(S): NPS Allelix Corp., Can.
SOURCE: PCT Int. Appl., 20 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE

WO 2000053208 A2 20000914 WO 2000-CA245 20000309
W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
PRIORITY APPLN. INFO.: GB 1999-5416 A 19990309
OTHER SOURCE(S): MARPAT 133:217704
AB Non-peptide agonists of the GLP-2 receptor are provided. In accordance with one aspect of the invention, there is provided, for use to treat subjects for which treatment with a GLP-2 peptide is indicated, a compd. characterized as having a mol. wt. of from about 100 Daltons to less than about 1000 Daltons and which possesses GLP-2 receptor agonist activity. Prepn. of e.g. 2-(benzoylamino)-.alpha.-[(4-chlorobenzylidine)hydrazino]benzaldehyde is described.

L83 ANSWER 4 OF 39 HCAPLUS COPYRIGHT 2001 ACS
ACCESSION NUMBER: 2000:421172 HCAPLUS
DOCUMENT NUMBER: 133:55144
TITLE: Novel G protein-coupled receptor protein from mouse and human, cDNA, and diagnostic and therapeutic uses
INVENTOR(S): Watanabe, Takuya; Kikuchi, Kuniko; Shintani, Yasushi
PATENT ASSIGNEE(S): Takeda Chemical Industries, Ltd., Japan
SOURCE: PCT Int. Appl., 94 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000035953	A1	20000622	WO 1999-JP6904	19991209
JP 2000295995	A2	20001024	JP 1999-351127	19991210

W: AE, AL, AM, AU, AZ, BA, BB, BG, BR, BY, CA, CN, CR, CU, CZ, DM, EE, GD, GE, HR, HU, ID, IL, IN, IS, JP, KG, KR, KZ, LC, LK, LR, LT, LV, MA, MD, MG, MK, MN, MX, NO, NZ, PL, RO, RU, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, US, UZ, VN, YU, ZA, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
PRIORITY APPLN. INFO.: JP 1998-353165 A 19981211
JP 1999-29677 A 19990208
AB A novel G protein-coupled receptor protein from mouse and human, peptide fragments or salts, and encoding polynucleotides, are disclosed. Also claimed are its recombinant expression, antibody, ligand and drugs contg. it, screening of compds. modulating the ligand binding to the receptor, screening kit, and antisense nucleotide. A method of quantifying mRNA or the receptor, diagnostic reagent for diseases related to the receptor function, and screening of compds. modulating the receptor expression. The cDNAs encoding a novel G-protein-coupled receptor protein mAL7T024 and hAL7T024 were isolated from a cDNA library of mouse spleen and human lung. Anal. of the putative amino acid sequences revealed the presence of 7 transmembrane domains in the hydropathy plot.
REFERENCE COUNT: 3
REFERENCE(S): (1) Allelix Biopharmaceuticals Inc; WO 9933972 A1 1999

HCAPLUS
(2) Smithkline Beecham Corp; JP 1118788 A
(3) Smithkline Beecham Corp; EP 878479 A 1998 HCAPLUS

L83 ANSWER 5 OF 39 HCAPLUS COPYRIGHT 2001 ACS
ACCESSION NUMBER: 2000:368395 HCAPLUS
DOCUMENT NUMBER: 133:13436
TITLE: Cloning and cDNA sequence of a human G-protein coupled 7TM receptor (HLWAR77) and its diagnostic and therapeutic uses
INVENTOR(S): Sathe, Ganesh M.; Elshourbagy, Nabil A.; Ames, Robert S., Jr.; Sarau, Henry M.; Foley, James J.; Chambers, Jon K.
PATENT ASSIGNEE(S): Smithkline Beecham Corporation, USA; Smithkline Beecham P.L.C.
SOURCE: PCT Int. Appl., 47 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000031107	A1	20000602	WO 1999-US27282	19991117

W: JP
RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE

PRIORITY APPLN. INFO.: US 1998-195517 A 19981119

AB HLWAR77 protein and cDNA and methods of producing such polypeptides by recombinant techniques are disclosed. HLWAR77 is structurally related to other proteins of the G-protein coupled receptor family. HLWAR77 is a 420-amino-acid protein having homol. with neuropeptide Y receptor. Also disclosed are methods of utilizing HLWAR77 polypeptides and polynucleotides in the design of protocols for the treatment of infections and diseases and diagnostic assays for the same. A method for identifying HLWAR77 agonists or antagonists in the presence of labeled or unlabeled ligand such as A-18-F-NH2 or F-8-F-NH2 also disclosed.

REFERENCE COUNT: 1
REFERENCE(S): (1) Fraser, C; Molecular properties and Regulation of G-Protein Coupled Receptors 1994, V49, P113 HCAPLUS

L83 ANSWER 6 OF 39 HCAPLUS COPYRIGHT 2001 ACS
ACCESSION NUMBER: 2000:117137 HCAPLUS
DOCUMENT NUMBER: 132:147643
TITLE: Protein and cDNA sequences of human G protein-coupled receptor (gene HG03), and uses thereof
INVENTOR(S): Liu, Qingyun; McDonald, Terrence P.; Wang, Ruiping
PATENT ASSIGNEE(S): Merck & Co., Inc., USA
SOURCE: PCT Int. Appl., 36 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000008133	A1	20000217	WO 1999-US17388	19990802

W: CA, JP, US

RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE
EP 1105465 A1 20010613 EP 1999-941986 19990802
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI
PRIORITY APPLN. INFO.: US 1998-95571 P 19980806
WO 1999-US17388 W 19990802

AB The invention provides protein and cDNA sequences of a novel human G protein-coupled receptor (gene HG03), which was isolated from a prostate cDNA library. The invention also provides for chimeric HG03 proteins and uses thereof. The invention further relates to methods of identifying ligands which bind to HG03 and agonists/antagonists of HG03.

REFERENCE COUNT: 2
REFERENCE(S): (1) Julius; US 4985352 A 1991 HCAPLUS
(2) Pfahl; US 5144007 A 1992 HCAPLUS

L83 ANSWER 7 OF 39 HCAPLUS COPYRIGHT 2001 ACS
ACCESSION NUMBER: 2000:98597 HCAPLUS
DOCUMENT NUMBER: 132:146624
TITLE: Endogenous constitutively activated G protein-coupled orphan receptors for drug screening
INVENTOR(S): Behan, Dominic P.; Chalmers, Derek T.; Liaw, Chen; Lin, I-Lin; Lowitz, Kevin; Chen, Ruoping
PATENT ASSIGNEE(S): Arena Pharmaceuticals, Inc., USA
SOURCE: PCT Int. Appl., 123 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000006597	A2	20000210	WO 1999-US17425	19990730
WO 2000006597	A3	20000518		

W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

AU 9955459	A1	20000221	AU 1999-55459	19990730
EP 1095275	A2	20010502	EP 1999-941990	19990730

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO

NO 2001000509	A	20010319	NO 2001-509	20010130

PRIORITY APPLN. INFO.: US 1998-94879 P 19980731
US 1998-106300 P 19981030
US 1998-110906 P 19981204
US 1999-121851 P 19990226
WO 1999-US17425 W 19990730

AB Disclosed herein are techniques for directly identifying candidate compds. as agonists, partial agonists and/or, most preferably, inverse agonists, to endogenous, constitutively activated orphan G protein-coupled receptors. Such directly identified compds. can be utilized, most preferably, in pharmaceutical compns.

L83 ANSWER 8 OF 39 HCAPLUS COPYRIGHT 2001 ACS

ACCESSION NUMBER: 2000:875707 HCAPLUS
DOCUMENT NUMBER: 134:36998
TITLE: Method of finding agonist and antagonist to human and rat GPR14
INVENTOR(S): Aiyar, Nambi V.; Ames, Robert S.; Arnold, Anne Romanic; Al-Barazanji, Kamal; Bergsma, Derk J.; Chambers, Jon; Douglas, Stephen A.; Foley, James J.; Gout, Bernard; Khandoudi, Nassirah; Sarau, Henry M.; Shabon, Usman; Willette, Robert N.
PATENT ASSIGNEE(S): Smithkline Beecham Corporation, USA; Smithkline Beecham Plc; SB Laboratoires Pharmaceutiques
SOURCE: U.S., 27 pp., Cont.-in-part of U.S. Ser. No. 58,725. CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 3
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 6159700	A	20001212	US 1999-232857	19990115
US 5851798	A	19981222	US 1997-789354	19970127
US 6133420	A	20001017	US 1998-58725	19980410
WO 9940192	A1	19990812	WO 1999-US1634	19990127
W: JP				
RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
EP 1056844	A1	20001206	EP 1999-903409	19990127
R: BE, CH, DE, DK, FR, GB, LI, NL				

PRIORITY APPLN. INFO.:

US 1997-789354	A2	19970127
US 1998-7407	P	19980209
US 1998-58725	A2	19980410
US 1998-74075	P	19980209
US 1999-232857	A	19990115
WO 1999-US1634	W	19990127

AB Human GPR14 polypeptides and polynucleotides and methods for producing such polypeptides by recombinant techniques are disclosed. Also disclosed are methods for utilizing Human GPR14 polypeptides and polynucleotides in the design of protocols for the treatment of ischemic coronary artery disease (angina and myocardial infarction); atherosclerosis; metabolic diseases (e.g. diabetes); CHF/myocardial dysfunction; arrhythmias; restenosis; hypertension; hypotension; pulmonary disease (hypertension, COPD, asthma); fibrotic vasculopathies (diabetes, SLE, AS, Reynaud's); cerebrovascular events (e.g. hemorrhagic and ischemic stroke); neurogenic inflammation/migraine; hematopoietic disorders; ARDS; cancer; autoimmune diseases (e.g. HIV-1 and -2 infection and AIDS); gastrointestinal and genitourinary disturbances (e.g. ulcers) endocrine disorders; fibroproliferative disorders (e.g. psoriasis); inflammatory disease (e.g. RA, Crohn's, IBS); benign prostatic hypertrophy; renal failure and glomerulopathies. In addn., design of protocols for treating disease states, both cardiovascular and non-cardiovascular, which are characterized by excessive vasoconstriction, myocardial dysfunction and/or aberrant fibroproliferative/inflammatory responses; psychotic and neurol. disorders, including anxiety, schizophrenia, manic depression, delirium, dementia, severe mental retardation, Parkinson's disease, and dyskinesias, infections such as bacterial, fungal, protozoan and viral infections; pain; eating disorders, such as obesity, anorexia, and bulimia; asthma; urinary retention; osteoporosis; allergies; Huntington's disease or Gilles dela Tourett's syndrome, among others and diagnostic assays for such conditions are disclosed.
REFERENCE COUNT: 13

REFERENCE(S):
(1) Anon; EP 0859052 A1 1998 HCAPLUS
(3) Marchese; Genomics 1995, V29, P335 HCAPLUS
(4) Marchese, A; Genomics 1995, V29, P335 HCAPLUS
(5) Mikayama, T; Proc Natl Acad Sci USA 1993, V90, P10056 HCAPLUS
(6) O'Carroll, A; Molecular PHarmacology 1994, V46, P291 HCAPLUS
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L83 ANSWER 9 OF 39 HCAPLUS COPYRIGHT 2001 ACS
ACCESSION NUMBER: 1999:708795 HCAPLUS
DOCUMENT NUMBER: 131:333794
TITLE: Human G-protein coupled receptor AXOR-1 polynucleotides and polypeptides, their sequences and biological, diagnostic and therapeutic uses
INVENTOR(S): Bergsma, Derk; Elshourbagy, Nabil; Shabon, Usman
PATENT ASSIGNEE(S): Smithkline Beecham Corporation, USA
SOURCE: PCT Int. Appl., 40 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9955734	A1	19991104	WO 1999-US8605	19990420
W: JP				
RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
US 6071722	A	20000606	US 1999-251373	19990216
EP 1104440	A1	20010606	EP 1999-918690	19990420
R: BE, CH, DE, DK, FR, GB, IT, LI, NL				

PRIORITY APPLN. INFO.:
US 1998-82981 P 19980424
US 1998-89639 P 19980617
US 1999-251373 A 19990216
WO 1999-US8605 W 19990420

AB The invention relates to human AXOR-1 polypeptides and polynucleotides, and to an expression system capable of expressing recombinant AXOR-1 polypeptides in host cells transformed with AXOR-1 polynucleotides. The AXOR-1 polypeptides are believed to be members of the G-protein coupled receptor family of polypeptides, based on sequence homol. with known G protein-coupled receptors. The invention presents the therapeutic, diagnostic and biol. uses of the AXOR-1 polypeptides and polynucleotides. Specifically, the invention presents methods for identifying agonists and/or antagonists of AXOR-1 using the materials of the invention, and the use of these identified compds. in treating conditions assocd. with an AXOR-1 imbalance. The invention also presents the use of nucleic acid mols. that inhibit prodn. of AXOR-1 for treating conditions assocd. with an AXOR-1 imbalance. The invention further presents a process for diagnosing a disease or susceptibility to a disease related to an AXOR-1 imbalance which involves detection of mutations in nucleic acid mols. encoding AXOR-1 and/or detection of an inappropriate level or activity of AXOR-1. CDNA sequence as well as the corresponding amino acid sequence of AXOR-1 are provided. The AXOR-1 polypeptide was shown to have homol. and/or structural similarity with human GPR27.

REFERENCE COUNT: 3
REFERENCE(S):
(1) Libert; Science 1989, V244, P569 HCAPLUS
(2) O'Dowd; Gene 1997, V187, P75 HCAPLUS
(3) O'Dowd; Genomics 1998, V47(2), P310 HCAPLUS

L83 ANSWER 10 OF 39 HCAPLUS COPYRIGHT 2001 ACS
ACCESSION NUMBER: 1999:708794 HCAPLUS
DOCUMENT NUMBER: 131:333793
TITLE: Human G-protein coupled receptor AXOR-2 polynucleotides and polypeptides, their sequences and biological, diagnostic and therapeutic uses
INVENTOR(S): Bergsma, Derk; Elshourbagy, Nabil; Shabon, Usman
PATENT ASSIGNEE(S): Smithkline Beecham Corporation, USA
SOURCE: PCT Int. Appl., 44 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9955733	A1	19991104	WO 1999-US8576	19990419
W: JP				
RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
EP 1073681	A1	20010207	EP 1999-917624	19990419
R: BE, CH, DE, DK, FR, GB, IT, LI, NL				

PRIORITY APPLN. INFO.: US 1998-83034 P 19980424
US 1999-277398 A 19990326
WO 1999-US8576 W 19990419

AB The invention relates to human AXOR-2 polypeptides and polynucleotides, and to an expression system capable of expressing recombinant AXOR-2 polypeptides in host cells transformed with AXOR-2 polynucleotides. The AXOR-2 polypeptides are believed to be members of the G-protein coupled receptor family of polypeptides, based on sequence homol. with known G protein-coupled receptors. The invention presents the therapeutic, diagnostic and biol. uses of the AXOR-2 polypeptides and polynucleotides. Specifically, the invention presents methods for identifying agonists and/or antagonists of AXOR-2 using the materials of the invention, and the use of these identified compds. in treating conditions assocd. with an AXOR-2 imbalance. The invention also presents the use of nucleic acid mols. that inhibit prodn. of AXOR-2 for treating conditions assocd. with an AXOR-2 imbalance. The invention further presents a process for diagnosing a disease or susceptibility to a disease related to an AXOR-2 imbalance which involves detection of mutations in nucleic acid mols. encoding AXOR-2 and/or detection of an inappropriate level or activity of AXOR-2. A full length cDNA sequence as well as the corresponding amino acid sequence of AXOR-2 are provided. The AXOR-2 polypeptide was shown to have homol. and/or structural similarity with human GPR27. The invention also provides an expression sequence tag (EST)-derived cDNA sequence encoding a partial AXOR-2 polypeptide. The amino acid sequence of this EST-derived protein is also provided.

REFERENCE COUNT: 3
REFERENCE(S): (1) Libert; Science 1989, V244, P569 HCAPLUS
(2) O'Dowd; Gene 1997, V187, P75 HCAPLUS
(3) O'Dowd; Genomics 1998, V47(2), P310 HCAPLUS

L83 ANSWER 11 OF 39 HCAPLUS COPYRIGHT 2001 ACS
ACCESSION NUMBER: 1999:708793 HCAPLUS
DOCUMENT NUMBER: 131:333034
TITLE: Cloning and cDNA sequence of a novel human neurotensin-like receptor (NLR) and methods for screening of NLR agonists and antagonists
INVENTOR(S): Ahmad, Sultan; Cao, Jack; O'Donnell, Dajan; Walker, Philippe

Searched by Barb O'Bryen, STIC 308-4291

PATENT ASSIGNEE(S): Astra Pharma Inc., Can.; Astra Aktiebolag
SOURCE: PCT Int. Appl., 46 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9955732	A1	19991104	WO 1999-SE598	19990415
W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
AU 9942980	A1	19991116	AU 1999-42980	19990415
EP 1071714	A1	20010131	EP 1999-947039	19990415
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				

PRIORITY APPLN. INFO.: SE 1998-1455 A 19980424
WO 1999-SE598 W 19990415

AB The present invention is directed to a novel G protein-coupled receptor which is expressed in the central nervous system of humans. Since it appears to share a substantial homol. with the human neurotensin receptor, it is referred to herein as the "neurotensin-like receptor.". The invention encompasses the receptor protein as well as nucleic acids encoding the protein. In addn., the invention is directed to methods and compns. which utilize the receptor.

REFERENCE COUNT: 3
REFERENCE(S):
(1) McKee, K; Genomics 1997, V46(3), P426 HCAPLUS
(2) Medical Research Council; WO 9429447 A2 1994 HCAPLUS
(3) Tyler, B; Brain Research 1998, V792, P246 HCAPLUS

L83 ANSWER 12 OF 39 HCAPLUS COPYRIGHT 2001 ACS
ACCESSION NUMBER: 1999:511249 HCAPLUS
DOCUMENT NUMBER: 131:140510
TITLE: Human G-Protein coupled receptor GPR14, its therapeutic and diagnostic uses, and methods of screening for its inhibitors/activators
INVENTOR(S): Douglas, Stephen A.; Willette, Robert N.; Aiyar, Nambi V.; Arnold, Anne Romanic; Khandoudi, Nassirah; Gout, Bernard; Al-Barazanji, Kamal; Ames, Robert S.; Foley, James J.; Sarau, Henry M.; Chambers, Jon; Shabon, Usman; Bergsma, Derk J.
PATENT ASSIGNEE(S): Smithkline Beecham Corporation, USA; Smithkline Beecham P.L.C.; Smithkline Beecham Laboratoires Pharmaceutiques
SOURCE: PCT Int. Appl., 64 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 3
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE

WO 9940192	A1	19990812	WO 1999-US1634	19990127
W: JP				
RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
US 6133420	A	20001017	US 1998-58725	19980410
US 6159700	A	20001212	US 1999-232857	19990115
EP 1056844	A1	20001206	EP 1999-903409	19990127
R: BE, CH, DE, DK, FR, GB, LI, NL				

PRIORITY APPLN. INFO.:

US 1998-74075	P	19980209
US 1998-58725	A	19980410
US 1999-232857	A	19990115
US 1997-789354	A2	19970127
US 1998-7407	P	19980209
WO 1999-US1634	W	19990127

AB The present invention provides protein and cDNA sequences encoding the novel human G-Protein coupled receptor GPR14. In another aspect of the invention there are provided methods of screening for compds. which bind to and activate or inhibit activation of rat or human GPR14 receptors, and for their ligands. In a preferred embodiment, the method further comprises conducting the drug screening in the presence of labeled or unlabeled fish or human urotensin II. The invention also relates to methods of diagnosis of a mutated form of human GPR14 gene and/or treatment of a wide variety of disease and disorders resulting from under-expression, over-expression or altered expression of said gene. Human GPR14 is structurally related to other G-Protein coupled receptors and has strong homol. with rat GPR14.

REFERENCE COUNT: 5

REFERENCE(S):
(1) Lee, N; Drug News and Perspectives 1993, V6(7), P488
(2) Marchese, A; Genomics 1995, V29, P335 HCAPLUS
(3) Stadel, J; Trends in Pharmacological Sciences 1997, V18(11), P430 HCAPLUS
(4) Tal, M; Biochemical and Biophysical Research Communications 1995, V209(2), P752 HCAPLUS
(5) Usman S; EP 0859052 A 1998 HCAPLUS

L83 ANSWER 13 OF 39 HCAPLUS COPYRIGHT 2001 ACS
ACCESSION NUMBER: 1999:421792 HCAPLUS
DOCUMENT NUMBER: 131:68558
TITLE: **Antagonists** of **G-protein** -coupled receptor and their therapeutic use
INVENTOR(S): Chemtob, Sylvain; Peri, Krishna G.; Potier, Michel
PATENT ASSIGNEE(S): Hopital Sainte-Justine, Can.
SOURCE: PCT Int. Appl., 26 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9932640	A1	19990701	WO 1998-CA1138	19981208
W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI,				

CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

US 5955575	A	19990921	US 1997-995927	19971222
AU 9915531	A1	19990712	AU 1999-15531	19981208
EP 1054983	A1	20001129	EP 1998-959690	19981208

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI

PRIORITY APPLN. INFO.: US 1997-995927 A 19971222
WO 1998-CA1138 W 19981208

AB The present invention relates to a new class of G-protein-coupled receptor antagonists which bind to the intracellular mol. interface between the receptor and the G-protein, thus hampering signal transduction. The present invention describes peptide sequences derived from the prostaglandin receptor F2.alpha. and the G-protein, G.alpha.q protein, produced by mol. biol. techniques or chem. synthesis, as selective inhibitors of signal transduction involved in the stimulation of this receptor. Such peptides or mols. derived from their primary, secondary and tertiary structures may be used as effective tocolytics for the prevention of premature labor or be utilized for the treatment of dysmenorrhea. Peptides derived from the third and forth intracellular domains of FP receptors (PCP-1 and PCP-2 resp.) and the .alpha.N and .alpha.C helixes of Gq-protein (PCP-3 and PCP-4 resp.) were found to be effective inhibitors of FP receptor.

REFERENCE COUNT: 4
REFERENCE(S):
(1) American Cyanamid Company; WO 9521925 A 1995 HCAPLUS
(2) Anon; 1996, 21, HCAPLUS
(3) Carrithers, M; 1996, V3(7), P537 HCAPLUS
(4) Duke University; WO 9205244 A 1992 HCAPLUS

L83 ANSWER 14 OF 39 HCAPLUS COPYRIGHT 2001 ACS
ACCESSION NUMBER: 1999:193833 HCAPLUS
DOCUMENT NUMBER: 130:232459
TITLE: Methods for G protein-coupled receptor activity screening
INVENTOR(S): Sadee, Wolfgang
PATENT ASSIGNEE(S): The Regents of the University of California, USA
SOURCE: U.S., 12 pp., Cont.-in-part of U.S. Ser. No. 261,500, abandoned.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 4
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 5882944	A	19990316	US 1995-447277	19950522
CA 2164966	AA	19950105	CA 1994-2164966	19940617
CA 2218726	AA	19961128	CA 1996-2218726	19960521
WO 9637775	A1	19961128	WO 1996-US7375	19960521

W: CA, JP, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE

EP 846265	A1	19980610	EP 1996-937114	19960521

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI

JP 11505718	T2	19990525	JP 1996-535821	19960521

PRIORITY APPLN. INFO.: US 1993-81612 19930623
US 1994-261500 19940616
US 1995-447277 19950522
WO 1996-US7375 19960521

AB A method for screening G protein-coupled receptors is provided in which G

protein-coupled receptors that are constitutively active are detd., e.g. by measuring receptor phosphorylation agonist independent signaling. When a G protein-coupled receptor is found to be regulated by constitutive activity, then assay systems may be set up to classify test compds. as agonists, neutral antagonists, or neg. antagonists with respect to G protein-coupled receptor signaling and phosphorylation. Such detns. and screening are useful for selecting new pharmaceuticals potentially useful in treating disease states mediated by G protein-coupled receptors, with applications including treatments in conjunction with narcotic analgesia.

REFERENCE COUNT: 21

REFERENCE(S):
(1) Abdelhamid; Eur J Pharmacol 1991, V198, P157 HCAPLUS
(3) Chen; Molecular Pharmacology 1993, V44, P8 HCAPLUS
(4) Costa; Molec Pharmacol 1992, V41, P549 HCAPLUS
(5) Frey; Endocrin 1984, V115, P1797 HCAPLUS
(6) Hawkins; J Pharmacol & Exp Ther 1989, V248, P73 HCAPLUS

ALL CITATIONS AVAILABLE IN THE RE FORMAT

L83 ANSWER 15 OF 39 HCAPLUS COPYRIGHT 2001 ACS

ACCESSION NUMBER: 1999:770070 HCAPLUS

DOCUMENT NUMBER: 132:245756

TITLE: Amphibian melanophore technology as a functional screen for **antagonists** of **G-protein** coupled 7-transmembrane receptors

AUTHOR(S): Nuttall, Mark E.; Lee, John C.; Murdock, Paul R.; Badger, Alison M.; Wang, Fei-Lan; Laydon, Jeffrey T.; Hofmann, Glenn A.; Pettman, Gary R.; Lee, Jonathan A.; Parihar, Ashu; Van Wagenen, Bradford C.; Fox, John; Gowen, Maxine; Johnson, Randall K.; Mattern, Michael R.

CORPORATE SOURCE: Departments of Bone and Cartilage Biology, SmithKline Beecham Pharmaceuticals, King of Prussia, PA, USA

SOURCE: J. Biomol. Screening (1999), 4(5), 269-277
CODEN: JBISF3; ISSN: 1087-0571

PUBLISHER: Mary Ann Liebert, Inc.

DOCUMENT TYPE: Journal

LANGUAGE: English

AB Xenopus laevis melanophores stably expressing 7-transmembrane G-protein-coupled receptors were established and evaluated, either as a primary screening utility for antagonists of the human calcium receptor, or as a screen to assign function to binding inhibitors of human cannabinoid receptors. Stably or transiently expressing melanophores responded selectively to resp. effectors of the human calcium, cannabinoid, and neurokinin-1 receptors. Several selective cannabinoid receptor-binding inhibitors of known potency were characterized as agonists or antagonists of the human peripheral cannabinoid (CB2) receptor. The results were consistent with changes in cAMP content of hCB2-transfected human embryonic kidney (HEK) cells challenged with the same CB2-binding antagonists. A stable melanophore cell line expressing the human calcium receptor was used to screen a compd. collection directly for functional antagonists, several of which were confirmed as antagonists in secondary screens by stimulating parathyroid hormone (PTH) secretion from bovine parathyroid cells. The percentage of hits in this cell-based screen was reasonably low (1.2%), indicating minimal interference due to toxic effects and validating melanophores as a primary screening modality. Also described is the development of a novel procedure for cryopreservation and reconstitution of cells retaining functional human receptors.

REFERENCE COUNT: 21

REFERENCE(S):
(4) Bloom, A; Neurosciences 1997, V22, P563 HCAPLUS

(5) Chen, W; Mol Pharmacol 1998, V53, P177 HCAPLUS
(6) Chomczynski, P; Biotechniques 1993, V15, P532 HCAPLUS
(7) Compton, D; J Pharmacol Exp Ther 1992, V263, P1118 HCAPLUS
(8) Felder, C; Mol Pharmacol 1995, V48, P443 HCAPLUS
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L83 ANSWER 16 OF 39 HCAPLUS COPYRIGHT 2001 ACS
ACCESSION NUMBER: 1998:221177 HCAPLUS
DOCUMENT NUMBER: 128:266232
TITLE: Methods of testing **antagonists** for their abilities to affect the activity of **G protein**-coupled receptors
INVENTOR(S): Dennis, Michael; Labrecque, Jean
PATENT ASSIGNEE(S): Dennis, Michael, Can.; Labrecque, Jean
SOURCE: PCT Int. Appl., 45 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9814780	A1	19980409	WO 1997-CA713	19971002
W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, HU, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, TJ, TM, TR, TT, UA, UG, US, UZ, VN, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
CA 2186979	AA	19980402	CA 1996-2186979	19961002
CA 2236205	AA	19980409	CA 1997-2236205	19971002
AU 9743742	A1	19980424	AU 1997-43742	19971002

PRIORITY APPLN. INFO.: CA 1996-2186979 19961002
WO 1997-CA713 19971002

AB Methods are provided to test and rank substances for their abilities to affect G protein-coupled receptor activity. Specifically, these methods include testing the ability of the antagonist to increase spontaneous G protein-coupled receptor activity and to sensitive G protein-coupled receptors to agonists. These methods will be useful in the pharmaceutical industry for screening new drugs for their abilities to interact with G protein-coupled receptors. Reagents necessary to use this method can be supplied as part of a test kit.

L83 ANSWER 17 OF 39 HCAPLUS COPYRIGHT 2001 ACS
ACCESSION NUMBER: 1998:515063 HCAPLUS
DOCUMENT NUMBER: 129:269899
TITLE: Development of Flashplate technology to measure [35S]GTP.gamma.S binding to Chinese hamster ovary cell membranes expressing the cloned human 5-HT1B receptor
AUTHOR(S): Watson, J.; Selkirk, J. V.; Brown, A. M.
CORPORATE SOURCE: Neurosciences Research, SmithKline Beecham Pharmaceuticals, Essex, UK
SOURCE: J. Biomol. Screening (1998), 3(2), 101-105
CODEN: JBISF3; ISSN: 1087-0571
PUBLISHER: Mary Ann Liebert, Inc.
DOCUMENT TYPE: Journal

LANGUAGE: English

AB With the exponential rate at which proposed drugs are being produced for disease therapy, it is now essential to automate assays used to screen these compds. and increase throughput. This has been rapidly adopted for simple radioligand binding assays but is less amenable for certain functional screens. [35S]GTP.gamma.S binding represents a convenient method for screening ligands that bind to G protein-coupled receptors and, ultimately, stimulate G-protein activation. In this study the authors have investigated the use of 96-well FlashPlates (NEN DuPont, Stevenage, England) to measure [35S]GTP.gamma.S binding to human 5-HT1B receptors expressed in Chinese hamster ovary cells. The cells were added to the individual wells of the FlashPlate and incubated with [35S]GTP.gamma.S in the presence or absence of test drug and bound radioactivity measured in a 96-well spectrometer. 5-HT produced a stimulation of basal [35S]GTP.gamma.S binding, which was robust within and between expts., with pEC50 = 8.1. The 5-HT1B partial agonist GR127935 ((2'-methyl-4'-5-methyl-1,2,4 oxadiazol-3-yl)-biphenyl-4-carboxylic acid [4-methoxy-3-(4-methyl-piperazin-1-yl)-phenyl]-amide) caused a partial stimulation (pEC50 = 8.3, intrinsic activity = 0.7), and the selective 5-HT1B receptor antagonist SB-224289 (2,3,6,7-tetrahydro-1'-methyl-5-{2'-methyl-4'-[(5-methyl-1,2,4-oxadiazole-3-yl)biphenyl-4-yl]carbonyl}furo[2,3-f]indole-3-spiro-4'-piperidine oxalate) displayed inverse agonism with pEC50 = 7.6. These results are similar to those obtained using the conventional filtration method and indicate that FlashPlate technol. can provide a rapid method for measuring [35S]GTP.gamma.S binding.

L83 ANSWER 18 OF 39 EMBASE COPYRIGHT 2001 ELSEVIER SCI. B.V.

ACCESSION NUMBER: 2001182298 EMBASE

TITLE: Biochemical and biophysical demonstration of GPCR oligomerization in mammalian cells.

AUTHOR: Angers S.; Salahpour A.; Bouvier M.

CORPORATE SOURCE: M. Bouvier, Universite de Montreal, Departement de Biochimie, Faculte de Medecine, P.O Box 6128, Montreal, Que. H3C 3J7, Canada. bouvier@bch.umontreal.ca

SOURCE: Life Sciences, (6 Apr 2001) 68/19-20 (2243-2250).
Refs: 17
ISSN: 0024-3205 CODEN: LIFSAK

PUBLISHER IDENT.: S 0024-3205(01)01012-8

COUNTRY: United States

DOCUMENT TYPE: Journal; Article

FILE SEGMENT: 028 Urology and Nephrology
029 Clinical Biochemistry

LANGUAGE: English

SUMMARY LANGUAGE: English

AB In contrast to other families of cell surface receptors, like tyrosine kinase receptors, for which dimerization is an integral part of the activation process, G-protein-coupled receptors (GPCRs) were thought, until recently, to function as monomeric units. However, a growing body of evidence indicates that GPCRs could exist and be active as oligomeric complexes. Because they are major pharmacological targets, their existence as homo- or hetero- oligomers could have important implications for the development and screening of new drugs. The major evidences supporting the idea of GPCR oligomerization come from indirect biochemical or pharmacological experiments. Here we report, using traditional co-immunoprecipitation methods, the existence of differentially epitope-tagged .beta.2-adrenergic receptor (.beta.2AR) oligomers in mammalian HEK-293 cells. Moreover, we validate the existence of receptor oligomers in living cells by a new Bioluminescence Resonance Energy Transfer (BRET) technique. Our results clearly demonstrate the presence of constitutive .beta.2AR oligomers in living cells that can be modulated by the selective adrenergic agonist isoproterenol, suggesting a pertinent

physiological role for GPCR oligomerization. .COPYRGT. Elsevier Science Inc.

L83 ANSWER 19 OF 39 EMBASE COPYRIGHT 2001 ELSEVIER SCI. B.V.
ACCESSION NUMBER: 2001078034 EMBASE
TITLE: Single-molecule detection technologies in miniaturized high throughput screening: Binding assays for G protein-coupled receptors using fluorescence intensity distribution analysis and fluorescence anisotropy.
AUTHOR: Rudiger M.; Haupts U.; Moore K.J.; Pope A.J.
CORPORATE SOURCE: A.J. Pope, Molec. Interactions/New Assay Tech., SmithKline Beecham Pharmaceuticals, New Frt. Sci. P. (N), Third Ave., Harlow, Essex CM19 5AW, United Kingdom.
Andrew_J_Pope@sbphrd.com
SOURCE: Journal of Biomolecular Screening, (2001) 6/1 (29-37).
Refs: 25
ISSN: 1087-0571 CODEN: JBISF3
COUNTRY: United States
DOCUMENT TYPE: Journal; Article
FILE SEGMENT: 027 Biophysics, Bioengineering and Medical Instrumentation
029 Clinical Biochemistry
037 Drug Literature Index
039 Pharmacy
LANGUAGE: English
SUMMARY LANGUAGE: English
AB G Protein-coupled receptors (GPCRs) represent one of the most important target classes for drug discovery. Various assay formats are currently applied to screen large compound libraries for agonists or antagonists. However, the development of nonradioactive, miniaturizable assays that are compatible with the requirements of ultra-high throughput screening (uHTS) has so far been slow. In this report we describe homogeneous fluorescence-based binding assays that are highly amenable to miniaturization. Fluorescence intensity distribution analysis (FIDA) is a single-molecule detection method that is sensitive to brightness changes of individual particles, such as those induced by binding of fluorescent ligands to membrane particles with multiple receptor sites. As a confocal detection technology, FIDA inherently allows reduction of the assay volume to the microliter range and below without any loss of signal. Binding and displacement experiments are demonstrated for various types of GPCRs, such as chemokine, peptide hormone, or small-molecule ligand receptors, demonstrating the broad applicability of this method. The results correlate quantitatively with radioligand binding data. We compare FIDA with fluorescence anisotropy (FA), which is based on changes of molecular rotation rates upon binding of fluorescent ligands to membranes. While FA requires a higher degree of binding, FIDA is sensitive down to lower levels of receptor expression. Both methods are, within these boundary conditions, applicable to uHTS.

L83 ANSWER 20 OF 39 EMBASE COPYRIGHT 2001 ELSEVIER SCI. B.V.
ACCESSION NUMBER: 2001056506 EMBASE
TITLE: In silico research in drug discovery.
AUTHOR: Terstappen G.C.; Reggiani A.
CORPORATE SOURCE: G.C. Terstappen, Biology Dept., GlaxoWellcome Med. Research Centre, Via A. Fleming 4, 37135 Verona, Italy.
gct66554@glaxowellcome.co.uk
SOURCE: Trends in Pharmacological Sciences, (1 Jan 2001) 22/1 (23-26).
Refs: 24
ISSN: 0165-6147 CODEN: TPHSDY
PUBLISHER IDENT.: S 0165-6147(00)01584-4

COUNTRY: United Kingdom
DOCUMENT TYPE: Journal; General Review
FILE SEGMENT: 022 Human Genetics
037 Drug Literature Index
039 Pharmacy
LANGUAGE: English
SUMMARY LANGUAGE: English
AB Target and lead discovery constitute the main components of today's early pharmaceutical research. The aim of target discovery is the identification and validation of suitable drug targets for therapeutic intervention, whereas lead discovery identifies novel chemical molecules that act on those targets. With the near completion of the human genome sequencing, bioinformatics has established itself as an essential tool in target discovery and the in silico analysis of gene expression and gene function are now an integral part of it, facilitating the selection of the most relevant targets for a disease under study. In lead discovery, advances in chemoinformatics have led to the design of compound libraries in silico that can be screened virtually. Moreover, computational methods are being developed to predict the drug-likeness of compounds. Thus, drug discovery is already on the road towards electronic R&D.

L83 ANSWER 21 OF 39 EMBASE COPYRIGHT 2001 ELSEVIER SCI. B.V.
ACCESSION NUMBER: 2001078033 EMBASE
TITLE: Development of a homogeneous MAP kinase reporter gene screen for the identification of agonists and antagonists at the CXCR1 chemokine receptor.
AUTHOR: Rees S.; Martin D.P.; Scott S.V.; Brown S.H.; Fraser N.; O'Shaughnessy C.; Beresford I.J.M.
CORPORATE SOURCE: S. Rees, Molecular Discovery Research Unit, Glaxo Wellcome Med. Res. Centre, Gunnels Wood Road, Stevenage, Hertfordshire SG1 2NY, United Kingdom. esr1353@glaxowellcome.co.uk
SOURCE: Journal of Biomolecular Screening, (2001) 6/1 (19-27). Refs: 29
ISSN: 1087-0571 CODEN: JBISF3
COUNTRY: United States
DOCUMENT TYPE: Journal; Article
FILE SEGMENT: 029 Clinical Biochemistry
037 Drug Literature Index
039 Pharmacy
LANGUAGE: English
SUMMARY LANGUAGE: English
AB Agonist activity at G protein-coupled receptors (GPCRs) that regulate heterotrimeric G proteins of the G.alpha.(i/o) or G.alpha.(q) families has been shown to result in activation of the mitogen-activated protein (MAP) kinase cascade. To facilitate compound screening for these classes of GPCR, we have developed a reporter gene that detects the activation of the ternary complex transcription factor Sapla following MAP kinase activation. In contrast to other reporter gene assays for G.alpha.(i/o)-coupled GPCRs, the MAP kinase reporter generates an increase in signal in the presence of agonist. The reporter gene has been transfected into Chinese hamster ovary cells to generate a "host" reporter gene-containing cell line. The G.alpha.(i)-coupled human CXCR1 chemokine receptor was subsequently transfected into this cell line in order to develop a 384-well format screen for both agonists and antagonists of this receptor. Agonists activated the reporter gene with the expected rank order of potency and with similar concentration dependence as seen with the regulation of other signal transduction cascades in mammalian cells: interleukin-8 (IL-8) (pEC(50) = 7.0 .+-. 0.1) > GCP-2 (pEC(50) = 6.3 .+-. 0.1) > NAP-2 (pEC(50) < 6). CXCR1-mediated activation of MAP kinase was inhibited by pertussis toxin and the MEK inhibitor PD98059, demonstrating

that receptor activation of MAP kinase is due to pertussis toxin-sensitive G.alpha.(i/o)-family G proteins to cause the activation of MEK kinase. Using the 384-well format, assay performance was unaffected by solvent concentrations of 0.5% ethanol, 0.15% glycerol, or 1% DMSO. Signal crosstalk between adjacent wells was less than 1%. The assay exhibited a Z factor of 0.53 and a coefficient of variation of response to repeated application of IL-8 (100 nM) of 15.9%.

L83 ANSWER 22 OF 39 EMBASE COPYRIGHT 2001 ELSEVIER SCI. B.V.
ACCESSION NUMBER: 2000282594 EMBASE
TITLE: High-throughput screening: New technology for the 21st century.
AUTHOR: Hertzberg R.P.; Pope A.J.
CORPORATE SOURCE: R.P. Hertzberg, Molecular Screening Technologies, SmithKline Beecham Pharmaceuticals, 709 Swedeland Road, King of Prussia, PA 19406, United States
SOURCE: Current Opinion in Chemical Biology, (2000) 4/4 (445-451). Refs: 83
ISSN: 1367-5931 CODEN: COCBF4
COUNTRY: United Kingdom
DOCUMENT TYPE: Journal; General Review
FILE SEGMENT: 027 Biophysics, Bioengineering and Medical Instrumentation
029 Clinical Biochemistry
LANGUAGE: English
SUMMARY LANGUAGE: English
AB New technologies in high-throughput screening have significantly increased throughput and reduced assay volumes. Key advances over the past few years include new fluorescence methods, detection platforms and liquid-handling technologies. Screening 100,000 samples per day in miniaturized assay volumes will soon become routine. Furthermore, new technologies are now being applied to information-rich cell-based assays, and this is beginning to remove one of the key bottlenecks downstream from primary screening.

L83 ANSWER 23 OF 39 EMBASE COPYRIGHT 2001 ELSEVIER SCI. B.V.
ACCESSION NUMBER: 2001116794 EMBASE
TITLE: HTS in the new millennium: The role of pharmacology and flexibility.
AUTHOR: Landro J.A.; Taylor I.C.A.; Stirtan W.G.; Osterman D.G.; Kristie J.; Hunnicutt E.J.; Rae P.M.M.; Sweetnam P.M.
CORPORATE SOURCE: J.A. Landro, Department of Research Technologies, Bayer Pharmaceuticals, 400 Morgan Lane, West Haven, CT 06516, United States. james.landro.b@bayer.com
SOURCE: Journal of Pharmacological and Toxicological Methods, (2000) 44/1 (273-289). Refs: 67
ISSN: 1056-8719 CODEN: JPTMEZ
PUBLISHER IDENT.: S 1056-8719(00)00108-8
COUNTRY: United States
DOCUMENT TYPE: Journal; Article
FILE SEGMENT: 029 Clinical Biochemistry
LANGUAGE: English
SUMMARY LANGUAGE: English
AB Over the past decade, high throughput screening (HTS) has become the focal point for discovery programs within the pharmaceutical industry. The role of this discipline has been and remains the rapid and efficient identification of lead chemical matter within chemical libraries for therapeutics development. Recent advances in molecular and computational biology, i.e., genomic sequencing and bioinformatics, have resulted in the announcement of publication of the first draft of the human genome. While much work remains before a complete and accurate genomic map will be

available, there can be no doubt that the number of potential therapeutic intervention points will increase dramatically, thereby increasing the workload of early discovery groups. One current drug discovery paradigm integrates genomics, protein biosciences and HTS in establishing what the authors refer to as the "gene-to-screen" process. Adoption of the "gene-to-screen" paradigm results in a dramatic increase in the efficiency of the process of converting a novel gene coding for a putative enzymatic or receptor function into a robust and pharmacologically relevant high throughput screen. This article details aspects of the identification of lead chemical matter from HTS. Topics discussed include portfolio composition (molecular targets amenable to small molecule drug discovery), screening file content, assay formats and plating densities, and the impact of instrumentation on the ability of HTS to identify lead chemical matter. .COPYRGT. 2001 Elsevier Science Inc.

L83 ANSWER 24 OF 39 EMBASE COPYRIGHT 2001 ELSEVIER SCI. B.V.
ACCESSION NUMBER: 2001061337 EMBASE
TITLE: Prolonged relief of chronic pain from local anesthetic blocks.
AUTHOR: Thompson E.N.
CORPORATE SOURCE: Dr. E.N. Thompson, PO Box 546, Manotick, Ont. K4M 1A5, Canada. nergard@aol.com
SOURCE: Pain Research and Management, (2000) 5/4 (241-242).
Refs: 12
ISSN: 1203-6765 CODEN: PRMAFB
COUNTRY: Canada
DOCUMENT TYPE: Journal; Editorial
FILE SEGMENT: 008 Neurology and Neurosurgery
037 Drug Literature Index
024 Anesthesiology
030 Pharmacology
036 Health Policy, Economics and Management
017 Public Health, Social Medicine and Epidemiology
LANGUAGE: English

L83 ANSWER 25 OF 39 EMBASE COPYRIGHT 2001 ELSEVIER SCI. B.V.
ACCESSION NUMBER: 2000326057 EMBASE
TITLE: A novel high throughput chemiluminescent assay for the measurement of cellular cyclic adenosine monophosphate levels.
AUTHOR: Chiulli A.C.; Trompeter K.; Palmer M.
CORPORATE SOURCE: A.C. Chiulli, Advanced Discovery Sciences, Applied Biosystems Tropix Division, 35 Wiggins Avenue, Bedford, MA 01730, United States. AChiulli@appliedbiosystems.com
SOURCE: Journal of Biomolecular Screening, (2000) 5/4 (239-247).
Refs: 15
ISSN: 1087-0571 CODEN: JBISF3
COUNTRY: United States
DOCUMENT TYPE: Journal; Article
FILE SEGMENT: 029 Clinical Biochemistry
LANGUAGE: English
SUMMARY LANGUAGE: English
AB The second messenger 3', 5'-cyclic AMP (cAMP) is a highly regulated molecule that is governed by G protein-coupled receptor activation and other cellular processes. Measurement of cAMP levels in cells is widely used as an indicator of receptor function in drug discovery applications. We have developed a nonradioactive ELISA for the accurate quantitation of cAMP levels produced in cell-based assays. This novel competitive assay utilizes chemiluminescent detection that affords both a sensitivity and a dynamic assay range that have not been previously reported with any other assay methodologies. The assay has been automated in 96- and 384-well

formats, providing assay data that are equivalent to, if not better than, data generated by hand. This report demonstrates the application of this novel assay technology to the functional analysis of a specific G protein-coupled receptor, neuropeptide receptor Y1, on SK-N-MC cells. Our data indicate the feasibility of utilizing this assay methodology for monitoring cAMP levels in a wide range of functional cell-based assays for high throughput screening.

L83 ANSWER 26 OF 39 EMBASE COPYRIGHT 2001 ELSEVIER SCI. B.V.
ACCESSION NUMBER: 2001017758 EMBASE
TITLE: A fluorescent reporter assay for the detection of ligands acting through G(i) protein-coupled receptors.
AUTHOR: Xing H.; Tran H.-C.; Knapp T.E.; Negulescu P.A.; Pollok B.A.
CORPORATE SOURCE: B.A. Pollok, Aurora Biosciences Corporation, 11010 Torreyana Road, San Diego, CA 92121, United States
SOURCE: Journal of Receptor and Signal Transduction Research, (2000) 20/4 (189-210).
Refs: 27
ISSN: 1079-9893 CODEN: JRETET
COUNTRY: United States
DOCUMENT TYPE: Journal; Article
FILE SEGMENT: 029 Clinical Biochemistry
LANGUAGE: English
SUMMARY LANGUAGE: English
AB Accompanying the advances in basic biology of G protein-coupled receptors (GPCRs) is the practical need among biopharmaceutical companies for sensitive assays to assess GPCR function, particularly formats that are compatible with high-throughput drug screening. Here we describe a novel cell-based assay format for the high-throughput detection of ligands for G(i) protein-coupled receptors. Two G(i)-GPCRs, .mu.-opioid receptor (.mu.-OPR) and 5-hydroxytryptamine receptor 1a (5HT1aR) are employed as model receptor targets. The key feature of this assay system is the isolation of stable, clonal Chinese hamster ovary (CHO) cell lines that carry three separate expression plasmids: (1) a chimeric G(q/i)5 protein (which re-directs a negative G(i)-type signal to a positive Gq-type response), (2) a given G(i)-GPCR, and (3) a .beta.-lactamase (.beta.la) reporter gene responsive to G(i)-GPCR signaling. Cell-based assays built using this format show appropriate rank order of potency among a reference set of receptor agonist and antagonist compounds. Such assays are also robust, reliable, and can be used for industrial-scale applications such as high-throughput screening for drug leads.

L83 ANSWER 27 OF 39 EMBASE COPYRIGHT 2001 ELSEVIER SCI. B.V.
ACCESSION NUMBER: 2000167630 EMBASE
TITLE: EDG receptors as a therapeutic target in the nervous system.
AUTHOR: Beer M.S.; Stanton J.A.; Salim K.; Rigby M.; Heavens R.P.; Smith D.; McAllister G.
CORPORATE SOURCE: M.S. Beer, Dept. Biochemistry Molecular Biology, Merck Sharp Dohme Res. Labs., Neuroscience Research Centre, Eastwick Road, Harlow, Essex CM20 2QR, United Kingdom
SOURCE: Annals of the New York Academy of Sciences, (2000) 905/- (118-131).
Refs: 19
ISSN: 0077-8923 CODEN: ANYAA
COUNTRY: United States
DOCUMENT TYPE: Journal; Conference Article
FILE SEGMENT: 008 Neurology and Neurosurgery
030 Pharmacology
LANGUAGE: English

SUMMARY LANGUAGE: English
AB EDG receptors are a family of closely related G-protein-coupled receptors, so-called since the first family member to be cloned is encoded by an endothelial differentiation gene. Of the six family members identified, five use lysophospholipids as their endogenous ligands. The sixth receptor, EDG-6, remains an orphan. These receptors activate multiple secondary-messenger pathways involving coupling to Gi, Gq/11, and G12/13 trimeric guanine nucleotide-binding proteins and are thought to play an important role in cell growth, development and maintenance, and cytoskeletal-dependent changes. EDG receptors are expressed in most mammalian cells and tissues, each subtype having a distinct distrubution pattern, raising the possibility of tissue-specific biological roles that could be explored in drug-discovery programs. In this study the distribution of EDG-receptor mRNA within the nervous system has been investigated. As seen in peripheral tissues, these receptors appear to be discretely localized within specific brain regions and cell types. For example, EDG-1, -3, -4 receptors are confined to neuronal cells, EDG-2 receptors to white matter tracts, while EDG-5 receptors appear to be expressed in various cell types, including neuronal cells, white matter tracts, and ependymal cells. EDG-6-receptor mRNA was not detected in the nervous system. Speculation as to the role of these receptors in physiological/pathophysiological processes, particularly those involving cell development, proliferation, maintenance, migration, differentiation, plasticity, and apoptosis can be made from such distribution studies. EDG receptors located in brain neuronal cells might, for example, influence apoptosis and be involved in cell rescue following ischemic damage or during the early stages of progressive neurodegenerative diseases. Those restricted to oligodendrocytes might play a crucial role in myelination and offer a potential target in the treatment of demyelinating diseases, such as multiple sclerosis. In order to explore the role of these receptors, it is necessary to identify selective compounds. To this end we have developed an agonist-induced [35S]GTP.gamma.S binding assay using an HEK cell line expressing a pertussis-toxin-insensitive human-EDG-2-rereptor-rat-Gi.alpha.1-fusion protein. Such as assay system ovecomes the problems associated with the almost ubiquitous responsiveness of mammalian cells to lysophospholipid. This assay lends itself to high throughput application, opening up the possibility of identifying compounds to further probe the therapeutic potential of EDG receptor manipulation.

L83 ANSWER 28 OF 39 EMBASE COPYRIGHT 2001 ELSEVIER SCI. B.V.
ACCESSION NUMBER: 2001059230 EMBASE
TITLE: Receptor-based drug discovery in human recombinant systems: From the orthosteric to the allosteric world.
AUTHOR: Kenakin T.
CORPORATE SOURCE: T. Kenakin, Department of Receptor Biochemistry, Glaxo Wellcome Research/Development, 5 Moore Drive, Research Triangle Park, NC 27709, United States. TPK1348@glaxo.com
SOURCE: Pharmacology Reviews and Communications, (2000) 11/1 (93-111).
Refs: 72
ISSN: 1028-8945 CODEN: PHRCF6
COUNTRY: United Kingdom
DOCUMENT TYPE: Journal; Article
FILE SEGMENT: 029 Clinical Biochemistry
030 Pharmacology
037 Drug Literature Index
LANGUAGE: English
SUMMARY LANGUAGE: English
AB G-protein coupled receptors (GPCR's) have been, and continue to be, rich and tractable biological targets for therapeutic intervention. There have

been two major developments in the drug discovery process for GPCR's over the past decade that have effectively revolutionized it. The first is a biological revolution with the introduction and increasing use of recombinant receptor systems in the screening and ligand characterization process. In addition to the obvious advantage of using human receptor material (as opposed to animal tissue) in screening, such recombinant systems have allowed the discovery of previously unknown behaviors of synoptic receptor systems. This, in turn, is leading to new approaches to new drug screening, new approaches to ligand characterization and classification, and the discovery of new types of chemical targets. The second revolution has been a technological one in which the ability to screen in high throughput mode in functional receptor systems (i.e. reporter assays) has opened new windows to the discovery of allosteric ligands as therapeutic drugs. Also, with the advent of robotics and chemical library synthesis, a larger sample size for chemical ligands now can be exposed to the biological screening process. This review will attempt to discuss the impact of these revolutions on the drug discovery process for GPCR's.

L83 ANSWER 29 OF 39 EMBASE COPYRIGHT 2001 ELSEVIER SCI. B.V.
ACCESSION NUMBER: 2000344221 EMBASE
TITLE: Use of recursive partitioning in the sequential screening of G-protein-coupled receptors.
AUTHOR: Jones-Hertzog D.K.; Mukhopadhyay P.; Keefer C.E.; Young S.S.
CORPORATE SOURCE: D.K. Jones-Hertzog, Chemoinformatics Group, Research Information Systems, Glaxo Wellcome Research/Development, 5 Moore Drive, Research Triangle Park, NC 27709, United States. djh72478@glaxowellcome.com
SOURCE: Journal of Pharmacological and Toxicological Methods, (1999) 42/4 (207-215).
Refs: 20
ISSN: 1056-8719 CODEN: JPTMEZ
PUBLISHER IDENT.: S 1056-8719(00)00073-3
COUNTRY: United States
DOCUMENT TYPE: Journal; Article
FILE SEGMENT: 029 Clinical Biochemistry
030 Pharmacology
037 Drug Literature Index
LANGUAGE: English
SUMMARY LANGUAGE: English
AB High-throughput screening (HTS) is changing as more compounds and better assay techniques become available. HTS is also generating a large amount of data. There is a need to rationalize the HTS process, because, in some cases, the screening of all available compounds is not economically feasible. In addition to the selection of promising compounds, there is a need to learn from the data that we collect. In this paper, we use a data-mining method, recursive partitioning, to help uncover and understand structure-activity relations and to help biology and chemistry experts make better decisions on which compounds to screen next and better characterize. The sequential-screening process is presented and the results of applying that process to 14 G-protein-coupled receptor assays are reported. Copyright (C) 2000 Elsevier Science Inc.

L83 ANSWER 30 OF 39 EMBASE COPYRIGHT 2001 ELSEVIER SCI. B.V.
ACCESSION NUMBER: 2000344220 EMBASE
TITLE: Constitutive receptor systems for drug discovery.
AUTHOR: Chen G.; Jayawickreme C.; Way J.; Armour S.; Queen K.; Watson C.; Ignar D.; Chen W.-J.; Kenakin T.
CORPORATE SOURCE: T. Kenakin, Department of Receptor Biochemistry, Glaxo Wellcome Research/Development, 5 Moore Drive, Research

Triangle Park, NC 27709, United States.
tpk1348@glaxowellcome.com
SOURCE: Journal of Pharmacological and Toxicological Methods, (1999) 42/4 (199-206).
Refs: 19
ISSN: 1056-8719 CODEN: JPTMEZ
PUBLISHER IDENT.: S 1056-8719(00)00075-7
COUNTRY: United States
DOCUMENT TYPE: Journal; Article
FILE SEGMENT: 029 Clinical Biochemistry
030 Pharmacology
037 Drug Literature Index
LANGUAGE: English
SUMMARY LANGUAGE: English
AB This paper discusses the use of constitutively active G-protein-coupled receptor systems for drug discovery. Specifically, the ternary complex model is used to define the two major theoretical advantages of constitutive receptor screening-namely, the ability to detect antagonists as well as agonists directly and the fact that constitutive systems are more sensitive to agonists. In experimental studies, transient transfection of Chinese hamster ovary cyclic AMP response element (CRE) luciferase reporter cells with cDNA for human parathyroid hormone receptor, glucagon receptor, and glucagon-like peptide (GLP-1) receptor showed cDNA concentration-dependent constitutive activity with parathyroid hormone (PTH-1) and glucagon. In contrast, no constitutive activity was observed for GLP-1 receptor, yet responses to GLP-1 indicated that receptor expression had taken place. In another functional system, Xenopus laevi melanophores transfected with cDNA for human calcitonin receptor showed constitutive activity. Nine ligands for the calcitonin receptor either increased or decreased constitutive activity in this assay. The sensitivity of the system to human calcitonin increased with increasing constitutive activity. These data indicate that, for those receptors which naturally produce constitutive activity, screening in this mode could be advantageous over other methods. Copyright (C) 2000 Elsevier Science Inc.

L83 ANSWER 31 OF 39 WPIDS COPYRIGHT 2001 DERWENT INFORMATION LTD
ACCESSION NUMBER: 2001-328653 [34] WPIDS
DOC. NO. NON-CPI: N2001-236511
DOC. NO. CPI: C2001-100794
TITLE: Seven transmembrane receptor polypeptides and polynucleotides, useful for treating neurological or psychiatric disorders, e.g. schizophrenia, as well as for identifying compounds useful for treating schizophrenia.
DERWENT CLASS: B04 D16 S03
INVENTOR(S): MERCHANT, K; VOGELI, G; WOOD, L S
PATENT ASSIGNEE(S): (PHAA) PHARMACIA & UPJOHN CO
COUNTRY COUNT: 94
PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG
WO 2001031014	A2	20010503	(200134)*	EN	215

RW: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW MZ NL OA PT SD SE SL SZ TZ UG ZW
W: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CR CU CZ DE DK DM DZ EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
WO 2001031014 A2		WO 2000-US29601	20001027

PRIORITY APPLN. INFO: US 2000-481794 20000112; US 1999-427653 19991027; US 1999-427859 19991027; US 1999-428020 19991027; US 1999-428114 19991027; US 1999-429517 19991028; US 1999-429555 19991028; US 1999-429676 19991028; US 1999-429695 19991028; US 1999-454399 19991203

AB WO 200131014 A UPAB: 20010620

NOVELTY - A purified and isolated seven transmembrane receptor polypeptide (I) comprising an amino acid sequence at least 90% identical to a sequence having 321, 337, 384, 333, 318, 307, 370, 396, 358 or 372 amino acids, or a fragment comprising an group specific to (I), is new.

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for the following:

(1) a purified and isolated polynucleotide comprising a nucleotide sequence that encodes (I);

(2) a vector comprising the polynucleotide;

(3) host cells stably transformed or transfected with the polynucleotide or the vector, in a manner allowing the expression of (I);

(4) a method for producing (I);

(5) an antibody specific for (I) and a hybridoma that produces the antibody;

(6) a cell-free composition comprising the antibody cited above, particularly polyclonal antibodies;

(7) an anti-idiotypic antibody specific for the antibody;

(8) a polypeptide comprising a fragment of the antibody, where the fragment specifically binds to (I);

(9) compositions comprising (I), the antibody or the antibody fragment of (8), in a pharmaceutical carrier;

(10) methods for **modulating** ligand binding of (I) comprising contacting (I) with the antibody or the antibody fragment;

(11) an assay for identifying compounds that bind (I);

(12) a method for identifying a **modulator** of binding between (I) and a binding partner of (I);

(13) methods for treating a neurological disorder, especially schizophrenia;

(14) a method of diagnosing schizophrenia or a susceptibility to schizophrenia;

(15) a method of screening a human subject to diagnose a disorder affecting the brain or a genetic predisposition for it;

(16) a method of screening for a CON202 hereditary schizophrenia genotype in a human patient;

(17) a kit for screening a human subject, in order to diagnose schizophrenia or a genetic predisposition to it;

(18) a method for identifying a seven transmembrane allelic variant that correlates with a mental disorder; and

(19) an assay for identifying compounds useful for treating schizophrenia.

ACTIVITY - Psychotropic; neuroleptic; nootropic; neuroprotective. no biological data given.

MECHANISM OF ACTION - **G protein-coupled receptor modulator**.

USE - (I) Or the composition comprising (I), the antibody, anti-idiotypic antibody, the polypeptide of (8), the compound identified in (11) or the **modulator** identified in (12) is useful for treating a neurological disorder, particularly schizophrenia (claimed).

(I) is also useful for identifying compounds useful for treating schizophrenia. These molecules or compounds are also useful for treating other neurological or psychiatric diseases, e.g. depression, anxiety, bipolar disease, affective disorders, attention deficit hyperactivity disorder/attention deficit disorder, epilepsy, neuritis, neurasthenia, neuropathy, neuroses, Alzheimer's disease, Parkinson's disease, migraine or senile dementia.

The vectors are useful for the recombinant production of the polypeptides.

Dwg.0/0

L83 ANSWER 32 OF 39 WPIDS COPYRIGHT 2001 DERWENT INFORMATION LTD
ACCESSION NUMBER: 2001-218450 [22] WPIDS
DOC. NO. NON-CPI: N2001-155692
DOC. NO. CPI: C2001-065276
TITLE: Novel purified isolated seven transmembrane **receptor** polypeptide (**G-protein coupled receptor**) useful for treating neurological and psychiatric diseases such as schizophrenia, depression, anxiety, bipolar disease and affective disorder.
DERWENT CLASS: B04 D16 S03
INVENTOR(S): VOGELI, G; WOOD, L S
PATENT ASSIGNEE(S): (PHAA) PHARMACIA & UPJOHN CO
COUNTRY COUNT: 94
PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG
WO 2001014554	A1	20010301	(200122)*	EN	70

RW: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW MZ NL OA PT SD SE SL SZ TZ UG ZW
W: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CR CU CZ DE DK DM DZ EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW

AU 2000066245 A 20010319 (200136)

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
WO 2001014554	A1	WO 2000-US21566	20000808
AU 2000066245	A	AU 2000-66245	20000808

FILING DETAILS:

PATENT NO	KIND	PATENT NO
AU 2000066245	A Based on	WO 200114554

PRIORITY APPLN. INFO: US 1999-377563 19990819

AB WO 200114554 A UPAB: 20010421

NOVELTY - Purified isolated CON167 seven transmembrane receptor polypeptide (I) comprising the fully defined 315 amino acid sequence given in the specification, or its fragment comprising an epitope specific to (I) is new.

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for the following:

(1) a purified and isolated polynucleotide (II) comprising a nucleotide sequence that encodes a mammalian seven transmembrane receptor,

where (II) hybridizes to the fully defined 948 base pair sequence given in the specification, or to its non-coding complementary strand, under the following hybridization conditions:

(a) hybridization for 16 hours at 42 deg. C in a hybridization solution comprising 50% formamide, 1% SDS (sodium dodecyl sulfate), 1M NaCl (sodium chloride), 10% Dextran sulfate; and

(b) washing 2 times for 30 minutes at 60 deg. C in a wash solution comprising 0.1 x SSC (saline sodium citrate) and 1% SDS ;

(2) a purified and isolated polynucleotide (III) encoding (I);

(3) a vector (IV) comprising (II) or (III);

(4) a host cell (V) comprising (III) or its fragment, or transformed or transfected with (IV) expressing (I) or its fragment encoded by (III);

(5) production (M1) of (I) comprising culture of (V);

(6) an antibody (VI) specific for (I);

(7) a hybridoma (VII) that produces (VI);

(8) a cell-free composition (VIII) comprising polyclonal antibodies, where at least one of the antibodies is (VI);

(9) an anti-idiotypic antibody (IX) specific for (VI);

(10) a polypeptide (X) comprising a fragment of (VI), where the fragment and (X) binds to the CON167 seven transmembrane receptor;

(11) an assay (M2) to identify compounds that bind (I) comprises contacting CON167 with a compound suspected of binding CON167, and measuring binding between the compound and CON167;

(12) a compound (XII) identified by (M2), where (XII) is not an antibody or a polypeptide comprising an antigen-binding fragment or an antibody that binds CON167;

(13) identifying (M3) a **modulator** of binding between (I) and a CON167 binding partner (BP) comprises contacting (BP) and (I) in the presence and absence of a putative **modulator** compound (MC), detecting binding between (BP) and (I) and identifying (MC) in view of decreased or increased binding between (BP) and (I) in the presence of (MC), as compared to binding in the absence of (MC); and

(14) a **modulator** (XIII) identified by (M3), where (XIII) decreases or increases binding between (BP) partner and (I).

ACTIVITY - Antidepressant; antimanic; tranquilizer; nootropic; anticonvulsant; antiparkinsonian; antimigraine; neuroprotective.

No supporting data given.

MECHANISM OF ACTION - **G-protein coupled receptor modulator**.

USE - (VI), (X), (XII) or (XIII) or a composition containing (VI), (X), (XII) or (XIII) are useful for **modulating** activity of (I) in a mammal comprising cells that express (I), preferably in a human suffering from neurological disorder (claimed) and/or psychiatric diseases such as schizophrenia, depression, anxiety, bipolar disease, affective disorder, attention deficit hyperactivity disorder/attention deficit disorder (ADHD/ADO), epilepsy, neuritis, neurasthenia, neuropathy, neuroses, Alzheimer's disease, Parkinson's disease, migraine and senile dementia.

(III) is useful for large scale expression of (I), for identification and isolation of polynucleotides encoding the related CON167 polypeptides, in hybridization assays to detect the capacity of cells to express CON167, in diagnostic methods for identifying a genetic alteration(s) in a CON167 locus that underlies a disease state or states, and for the development of (transgenic) animals that fail to express functional CON167 or that express a variant of CON167.

Dwg.0/2

L83 ANSWER 33 OF 39 WPIDS COPYRIGHT 2001 DERWENT INFORMATION LTD
ACCESSION NUMBER: 2000-329165 [28] WPIDS
CROSS REFERENCE: 2000-317935 [27]; 2000-317986 [27]; 2000-400068 [34]
DOC. NO. NON-CPI: N2000-247769

DOC. NO. CPI: C2000-099803
TITLE: Non-endogenous constitutively activated human **G protein-coupled receptors**, useful for identifying **agonists** for use as pharmaceutical agents.
DERWENT CLASS: B04 D16 S03
INVENTOR(S): BEHAN, D P; CHALMERS, D T; LIAW, C W
PATENT ASSIGNEE(S): (AREN-N) ARENA PHARM INC
COUNTRY COUNT: 90
PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG
WO 2000022129	A1	20000420	(200028)*	EN	341
RW: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW NL OA PT SD SE SL SZ TZ UG ZW					
W: AE AL AM AT AU AZ BA BB BG BR BY CA CH CN CR CU CZ DE DK DM EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW					
AU 9964307	A	20000501	(200036)		

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
WO 2000022129	A1	WO 1999-US23938	19991012
AU 9964307	A	AU 1999-64307	19991012

FILING DETAILS:

PATENT NO	KIND		PATENT NO
AU 9964307	A	Based on	WO 200022129

PRIORITY APPLN. INFO: US 1998-170496 19981013

AB WO 200022129 A UPAB: 20000718
NOVELTY - A constitutively active, non-endogenous version of an endogenous human orphan **G protein coupled receptor** (GPCR) (I), comprising an amino acid sequence region (S) (carboxy-terminus to amino terminus orientation) traversing the transmembrane-6 (TM6) and **intracellular loop**-3 (IC3) regions of the non-endogenous GPCR, is new.

DETAILED DESCRIPTION - (I) comprises an amino acid region (S) defined as P1AA15X, where

P1 = endogenous orphan GPCR proline residue or non-endogenous amino acid other than proline, located within the TM6 region of non-endogenous GPCR;

AA15 = 15 endogenous amino acid residues of (I), 15 non-endogenous amino acids, or a combination of 15 amino acid residues, containing at least 1 endogenous amino acid of (I), and at least 1 non-endogenous amino acid: and

X = non-endogenous amino acid located within the IC3 region.

INDEPENDENT CLAIMS are also included for the following:

(1) a nucleic acid sequence (II) encoding (I);

(2) a vector or plasmid comprising (II);

(3) a host cell comprising (I) or (II);

(4) selecting (III) for alteration of an endogenous amino acid within the third **intracellular** group of GPCR, comprising TM6 and IC3 region, where the endogenous amino acid when altered to a non-endogenous amino acid constitutively activates human GPCR, comprising;

(a) identifying an endogenous proline residue within TM6 region of human GPCR;

(b) identifying the endogenous, 16th amino acid residue from the proline residue, by moving in a direction of C-terminus to N terminus of GPCR;

(c) altering an endogenous residue of (b) to a non-endogenous amino acid, to create a non-endogenous version of an endogenous human GPCR; and

(d) determining if the non-endogenous human GPCR of (c) is constitutively active;

(5) an algorithmic approach (IV) for creating (I), comprising;

(a) selecting an endogenous human GPCR comprising proline in the TM6 region;

(b) identifying an endogenous amino acid by counting 16 amino acids from the proline of (a);

(c) altering the identified amino acid to a non-endogenous amino acid and determining whether it is constitutively active;

(6) a constitutively active, non-endogenous human GPCR produced by (III) or (IV);

(7) a method for directly identifying an inverse **agonist**, **agonist**, or partial **agonist** of a non-endogenous, constitutively activated (I), comprising

(a) selecting an endogenous human GPCR;

(b) identifying a proline residue within the TM6-region of the GPCR of (a);

(c) identifying, in a carboy-terminus to amino-terminus direction, the endogenous 16th amino acid residue form the proline residue of (b);

(d) altering the endogenous amino acid of (c) to a non-endogenous amino acid;

(e) confirming that the non-endogenous GPCR of (d) is constitutively active;

(f) contacting a test compound with the GPCR of (5); and

(g) determining, by measuring the compound efficacy at the contacted receptor, if the compound is an inverse **agonist**, **agonist** or partial **agonist** of the receptor;

(8) a compound (V) selected from inverse **agonists**, **agonist** and partial **agonist** identified by the method of (7); and

(9) a composition comprising (V).

ACTIVITY - None given.

MECHANISM OF ACTION - Human GPCR agonist.

USE - (I) is useful for identifying inverse agonists, agonists and partial agonists (claimed) for use as pharmaceutical agents. (I) is also useful for research settings for elucidating the role of receptors in normal and diseased conditions. Inverse agonists are useful for treating disease and disorders associated with the receptor.

ADVANTAGE - (I) can be used directly for screening of compounds without the need for endogenous ligands.

Dwg.0/19

L83 ANSWER 34 OF 39 WPIDS COPYRIGHT 2001 DERWENT INFORMATION LTD
ACCESSION NUMBER: 2000-317935 [27] WPIDS
CROSS REFERENCE: 2000-317986 [27]; 2000-329165 [27]; 2000-400068 [34]
DOC. NO. CPI: C2000-096286
TITLE: Identifying compounds with inverse **agonist** activity to orphan receptors useful for treating e.g. Graves' disease, and schizophrenia, involves contacting candidate compounds with constitutively activated receptors.
DERWENT CLASS: B04 D16
INVENTOR(S): BEHAN, D P; CHALMERS, D T
PATENT ASSIGNEE(S): (AREN-N) ARENA PHARM INC

COUNTRY COUNT: 1
PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG
WO 2000021987	A2	20000420	(200027)*	EN	110
W: JP					

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
WO 2000021987	A2	WO 1999-US23935	19991012

PRIORITY APPLN. INFO: US 1998-170496 19981013

AB WO 200021987 A UPAB: 20000718
NOVELTY - Directly identifying a compound having inverse **agonist** activity, partial **agonist** activity or **agonist** activity to a constitutively active orphan receptor (ORR), comprising determining the efficacy of the compound by contacting it with the ORR, is new.
DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for the following:
(1) a compound (I) identified by the novel method; and
(2) a pharmaceutical composition comprising (I).
ACTIVITY - Antithyroid; antidiabetic; neuroleptic; antidepressant; cytostatic.
MECHANISM OF ACTION - **G protein-coupled receptor agonist**. No supporting data is given.
USE - (I) having inverse **agonist** activity to ORR is useful for treatment of diseases characterized by constitutive activation of the receptor e.g. Graves' disease, male precocious puberty, Jansen's disease, retinitis pigmentosa, hypoparathyroidism, neuropsychiatric diseases, schizophrenia, major depression, and cancerous growth in Kaposi's sarcoma.
ADVANTAGE - The method can identify (I) directly without prior knowledge or use of receptor ligands and is useful for accelerating drug discovery at a broad range of ORR.
Dwg.0/17

L83 ANSWER 35 OF 39 WPIDS COPYRIGHT 2001 DERWENT INFORMATION LTD
ACCESSION NUMBER: 2000-283576 [24] WPIDS
DOC. NO. NON-CPI: N2000-213390
DOC. NO. CPI: C2000-085688
TITLE: New **G protein-coupled receptor** (GPCR) **agonist** or **antagonist** for preventing premature delivery of fetus and for preventing and/or treating dysmenorrhea.
DERWENT CLASS: B04 D16 S03
INVENTOR(S): CHEMTOB, S; PERI, K G
PATENT ASSIGNEE(S): (HOPI-N) HOPITAL SAINTE-JUSTINE
COUNTRY COUNT: 89
PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG
WO 2000017348	A1	20000330	(200024)*	EN	32
RW: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW NL OA PT SD SE SL SZ TZ UG ZW					
W: AE AL AM AT AU AZ BA BB BG BR BY CA CH CN CR CU CZ DE DK DM EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ					

TM TR TT TZ UA UG US UZ VN YU ZA ZW
AU 9957224 A 20000410 (200035)

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
WO 2000017348	A1	WO 1999-CA844	19990915
AU 9957224	A	AU 1999-57224	19990915

FILING DETAILS:

PATENT NO	KIND		PATENT NO
AU 9957224	A	Based on	WO 200017348

PRIORITY APPLN. INFO: US 1998-154627 19980917

AB WO 200017348 A UPAB: 20000522
NOVELTY - A **G protein-coupled receptor agonist** or **antagonist** which specifically binds to the juxtamembrane extracellular structural elements of the **G protein-coupled receptor** in a manner different from that of the natural ligand and where the **agonist** or **antagonist** alters the transduction of an **intracellular** signal, is new.

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for the following:

(1) a peptide having an amino acid sequence selected from:

(a) one of the 12 peptide sequences ((I) to (XII)) given in the specification, where the amino acid sequence contains L- and/or D-amino acid;

(b) an amino acid sequence which has at least 90% homology to (I) to (XII); or

(c) a peptidomimetic of the peptides of (a) or (b); and

(2) a method of identifying a compound as a **G protein-coupled receptor agonist** or **antagonist** capable of binding to the extracellular elements of the receptor in a manner different from that of the natural ligand, comprises:

(a) culturing cells which express the receptor or identifying animal tissues ex vivo or in vivo where physiological consequences are dependent on the receptor;

(b) contacting the cells or tissues with the compound to be tested for **agonist** or **antagonist** activity at the receptor; and

(c) measuring a response to alter the transduction of a signal resulting in physiological consequences selected from the group consisting of increments in cell calcium, phosphoinositide hydrolysis, increased/decreased cellular cyclic adenosine monophosphate, cell growth and/or differentiation, altered gene expression, and smooth muscle contraction or dilation, where the response is indicative of **agonist** or **antagonist** activity.

ILGHRDYK (PCP-8) (I),
WEDRFYLL (PCP-10) (II) ,
YQDRFYLL (PCP-14) (III),
ILAHRDYK (PCP-13.7) (IV),
ILGFRDYK (PCP-13.11) (V),
ILGHKDYK (PCP-13.13) (VI),
ILGHRNYK (PCP-13.14) (VII),
ILGHQDYK (PCP-13.18) (VIII),
ILGHRDY (PCP-13.20) (IX)
ILGWRDYK (PCP-13.22) (X),

ILGXRDYK (PCP-13.24) (XI), and
SNVLCSIF (PCP-15) (XII).
ACTIVITY - Gynecological; analgesic.
MECHANISM OF ACTION - **G protein-coupled receptor agonist** or **antagonist**.

Uterine tissues from non-pregnant adult pigs were obtained from a local slaughter house. Uterine myometrial strips of approximately 1 cm in length were set up in organ baths containing kreb's buffer equilibrated with 21% oxygen at 37 deg. C as described in Potvin, W. et al., 1990, Br. J. Pharmacol. 100:341-347 and Varma. D.R. and Chemtob, S., 1993, J. Pharmacol. Expt. Ther. 265:1096-1104. Contractions were recorded by force transducers in Grass-polygraph. Strips were incubated with or without 100 micro M of WEDRFYLL (PCP-10) peptide for 30 minutes before adding prostanoid receptor PGF2 alpha in step-wise increments (10-9 to 10-6 M). Data were expressed as percentage increase over the basal level of average tension (g). The results showed that addition of 100 micro M PCP-10 peptide reduced the force of basal contraction.

USE - The **G protein-coupled receptor antagonist** or its functional derivatives is useful for preventing premature delivery of fetus, and for preventing and/or treating dysmenorrhea (claimed).

Dwg.0/4

L83 ANSWER 36 OF 39 WPIDS COPYRIGHT 2001 DERWENT INFORMATION LTD
ACCESSION NUMBER: 2000-246754 [21] WPIDS
CROSS REFERENCE: 2000-246753 [20]
DOC. NO. CPI: C2000-074785
TITLE: New **G protein-coupled receptors** with a mutation in an **intracellular** domain, useful for high throughput screening assays for e.g. drugs, insecticides or nematocides.
DERWENT CLASS: B04 D16
INVENTOR(S): PAUSCH, M H; WESS, J
PATENT ASSIGNEE(S): (PAUS-I) PAUSCH M H; (WESS-I) WESS J
COUNTRY COUNT: 88
PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG
WO 2000012705	A2	20000309	(200021)*	EN	37

RW: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW NL OA PT SD SE SL SZ UG ZW
W: AE AL AM AT AU AZ BA BB BG BR BY CA CH CN CR CU CZ DE DK DM EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT UA UG US UZ VN YU ZA ZW

AU 9957011 A 20000321 (200031)

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
WO 2000012705	A2	WO 1999-US20013	19990901
AU 9957011	A	AU 1999-57011	19990901

FILING DETAILS:

PATENT NO	KIND		PATENT NO
AU 9957011	A	Based on	WO 200012705

PRIORITY APPLN. INFO: US 1998-98704 19980901
AB WO 200012705 A UPAB: 20000630
NOVELTY - A modified **G protein-coupled receptor** (GPCR) having a mutation in an **intracellular** domain which results in an improved functional response in cell-based assays is new.
DETAILED DESCRIPTION - A modified **G protein-coupled receptor** (GPCR) having a mutation in an **intracellular** domain which results in an improved functional response in cell-based assays is new; the GPCR is a muscarinic acetylcholine receptor (MAR), a cholecystokinin CCKB receptor, a somatostatin receptor (SSTR), an alpha2A adrenergic receptor or a serotonin receptor.
The modification promotes growth stimulation by a GPCR **agonist**, especially by improving coupling between the receptor and a heterotrimeric G protein (such coupling being necessary in the triad system in which the receptor is coupled to a G protein which in turn is coupled to a cellular effector) and/or failure of the receptor to interact with cell desensitization and/or sequestration/internalization machinery and/or proper plasma membrane localization.
INDEPENDENT CLAIMS are also included for:
(1) polynucleotides as follows:
(i) encoding a mutated GPCR as above; or
(ii) encoding a chimeric GPCR comprising a modified **intracellular** domain of a GPCR (optionally the third **intracellular loop**) conferring an improved functional response in a cell-based assay;
(2) vectors comprising a polynucleotide as above;
(3) host cells transformed with the vector, optionally further comprising a plasmid comprising an inducible reporter gene; and
(4) host cells comprising a heterologous GPCR having a modification that results in an improved functional response.
USE - The modified GPCRs can be used in improved high throughput screening assays (especially in yeast cells) for therapeutic drugs, insecticides, nematacides etc. The host cells can be used to screen compounds capable of binding to GPCRs, by measuring the effect of the compound on cell growth (claimed); the mutant GPCRs decrease the number of false negatives and/or increase sensitivity by preventing or reducing cell growth arrest due to cell desensitization and/or sequestration/internalization.
ADVANTAGE - The modified GPCRs have improved performance in high throughput screening assays (e.g. in yeast cells), enabling improved **agonist**-stimulated growth and/or functioning of GPCRs which fail to function in their wild-type forms.
Dwg.0/7

L83 ANSWER 37 OF 39 WPIDS COPYRIGHT 2001 DERWENT INFORMATION LTD
ACCESSION NUMBER: 2000-246753 [21] WPIDS
CROSS REFERENCE: 2000-246754 [20]
DOC. NO. CPI: C2000-074784
TITLE: Novel host cells comprising heterologous **G protein-coupled receptor** modified to be constitutively active, useful for high throughput screening assays for e.g. drugs, insecticides or nematacides.
DERWENT CLASS: B04 D16
INVENTOR(S): BAUMBAUCH, W; BIRSAN, C; KAJKOWSKI, E M; LAI, M; OZENBERGER, B A; PAUSCH, M H; SILVERMAN, S; TSENG, E
PATENT ASSIGNEE(S): (BAUM-I) BAUMBAUCH W; (BIRS-I) BIRSAN C; (KAJK-I) KAJKOWSKI E M; (LAIM-I) LAI M; (OZEN-I) OZENBERGER B A;

(PAUS-I) PAUSCH M H; (SILV-I) SILVERMAN S; (TSEN-I) TSENG E

COUNTRY COUNT: 88

PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG
WO 2000012704	A2	20000309	(200021)*	EN	75

RW: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW NL OA PT SD SE SL SZ UG ZW

W: AE AL AM AT AU AZ BA BB BG BR BY CA CH CN CR CU CZ DE DK DM EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT UA UG US UZ VN YU ZA ZW

AU 9957009 A 20000321 (200031)

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
WO 2000012704	A2	WO 1999-US20011	19990901
AU 9957009	A	AU 1999-57009	19990901

FILING DETAILS:

PATENT NO	KIND		PATENT NO
AU 9957009	A	Based on	WO 200012704

PRIORITY APPLN. INFO: US 1998-98704 19980901

AB WO 200012704 A UPAB: 20000630

NOVELTY - Host cells comprising constitutively active heterologous **G protein-coupled receptors** (GPCR's), are new.

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for the following:

(1) host cells comprising a heterologous GPCR and a mutation in a host cell gene resulting in an improved functional GPCR response in a cell-based assay;

(2) host cells comprising a modified G protein alpha -subunit gene encoding a chimeric G alpha protein;

(3) isolated DNA polynucleotides encoding a chimeric G alpha protein comprising:

(i) a sequence encoding an amino terminal domain (optionally an interaction domain for a G beta protein, a G gamma protein and an effector molecule), and a sequence encoding the carboxy terminus of a second species; or

(ii) a sequence where the five carboxyl terminal amino acids (aa's) are substituted with equivalent an sequence from another species;

(4) polypeptides encoded by the polynucleotides of (3); and

(5) expressing a constitutively active heterologous GPCR in host (preferably yeast) cells, by transforming cells with a polynucleotide encoding a GPCR modified to be constitutively active, and culturing the cells.

USE - Host cells comprising a constitutively active modified GPCR are useful in high throughput screening assays for therapeutic drugs, insecticides, nematacides etc., and are especially useful for assays using orphan receptors. The host cells of (1) (comprising a gene mutation improving the functional response of a GPCR) and of (2) (comprising a G protein alpha -subunit gene modified to improve coupling efficiency between the G protein and GPCR, and so enhance the functional expression

of a GPCR) are useful in improved high throughput screening assays as above. The host cells comprising a modified GPCR and host cells of (1) can be used to screen for compounds binding to GPCRs, by measuring the effect of the compound on cell growth (claimed). The host cells of (2) can be used to measure **agonist**-stimulated activation of a heterologous GPCR, or to measure the coupling specificity of a G alpha protein for a heterologous GPCR, by using a cell additionally comprising a heterologous GPCR/transforming the cell with a vector comprising a DNA sequence encoding a heterologous GPCR, culturing the cell with an **agonist** specific for the GPCR and measuring cell growth (claimed).

ADVANTAGE - Host cells comprising a constitutively active modified GPCR permit the detection of a receptor's functional activity in the absence of activating ligands (which was not previously possible for orphan receptors).

Dwg.0/12

L83 ANSWER 38 OF 39 WPIDS COPYRIGHT 2001 DERWENT INFORMATION LTD
ACCESSION NUMBER: 1998-495389 [42] WPIDS
DOC. NO. CPI: C1998-149144
TITLE: Method of constitutively activating targetted **G -protein coupled** mono amine **receptor** - comprises use of site directed mutagenesis, useful for, e.g. screening for **agonists** and **antagonists** of native receptor.
DERWENT CLASS: B04 D16
INVENTOR(S): EGAN, C C; HERRICK-DAVIS, K; TEITLER, M
PATENT ASSIGNEE(S): (EGAN-I) EGAN C C; (HERR-I) HERRICK-DAVIS K; (TEIT-I) TEITLER M
COUNTRY COUNT: 30
PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG
WO 9838217	A1	19980903	(199842)*	EN	97
RW: AT BE CH DE DK ES FI FR GB GR IE IT LU MC NL PT SE					
W: AU BR CA CN CZ IL JP KR MX NO NZ PL RU					
AU 9863439	A	19980918	(199908)		

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
WO 9838217	A1	WO 1998-US3991	19980227
AU 9863439	A	AU 1998-63439	19980227

FILING DETAILS:

PATENT NO	KIND		PATENT NO
AU 9863439	A	Based on	WO 9838217

PRIORITY APPLN. INFO: US 1997-61268 19971007; US 1997-39465 19970227

AB WO 9838217 A UPAB: 19981125
A novel method of constitutively activating targeted **G-protein coupled** mammalian monoamine **receptors** comprises: (a) aligning a conserved amino acid sequence occurring in the sixth transmembrane domain of the targeted monoamine receptor with the conserved amino acid sequence in the sixth transmembrane domain of a second monoamine receptor for which a constitutively activated form having

a mutation in the third **intracellular loop** is known;
(b) identifying in the aligned receptor sequences the amino acid position in the targeted monoamine receptor which corresponds to the amino acid position in the third **intracellular loop** which
produced constitutive activation in the second monoamine receptor, and (c) mutating, by site-directed mutagenesis, the identified amino acid position in the targeted monoamine receptor so that a different amino acid is substituted for the amino acid occurring in the native targeted receptor. Also claimed are: (1) constitutively active 5HT2A receptor in which the amino acid at position 322 has been mutated from the cysteine found in the native receptor to Lysine, glutamic acid or arginine; (2) constitutively active 5HT2C receptor in which the amino acid at position 312 has been mutated from the serine found in the native receptor to Lysine, glutamic acid or arginine; (3) DNA encoding the receptor of (1) or (2); (4) a method of efficiently minimising the number of full DNA sequencing which must be performed on the colonies resulting from site directed mutagenesis employing vectors, by eliminating most colonies not containing the desired mutation and by tagging colonies containing the desired mutation for easy identification comprising: (a) creating two primers, the first of which will remove a restriction site occurring in the original form of the vector and the second of which will introduce the desired mutation as well as a second mutation which specifies a unique restriction site not found in the primer; (b) annealing the primers to the vector; (c) synthesising the second strands; (d) exposing the double stranded DNA to the restriction site that occurs on the original vector thereby digesting the DNA containing the restriction site so that it cannot be taken up during a subsequent transformation; (e) transforming the test organism with the remaining double stranded circular DNA, and (f) testing the resulting colonies to see if they contain DNA which can be digested by the restriction enzyme for the unique site introduced by the second primer, where only DNA from those colonies which have incorporated the desired mutation will be digested with the restriction enzyme for the unique restriction site and the presence of such digestion indicates that the colony contains the desired mutation; (5) constitutively active 5-HT2A receptor coded by one of the three 1566 bp DNA sequences given in the specification, that also contains a mutation creating a unique restriction site; (6) constitutively active 5-HT2C receptor coded by one of the two 2246 bp DNA sequences given in the specification, that also contains a mutation creating a unique restriction site, and (7) a transgenic mammal having incorporated and expressed in its genome a constitutively activated monoamine **G protein coupled receptor**

USE - The constitutively activated monoamine **G protein coupled receptor** can be used to screen for **agonists**, inverse **agonists**, and **antagonists** of the native receptor (claimed).
Dwg.0/36

L83 ANSWER 39 OF 39 WPIDS COPYRIGHT 2001 DERWENT INFORMATION LTD
ACCESSION NUMBER: 1997-402552 [37] WPIDS
DOC. NO. CPI: C1997-129889
TITLE: **G-protein-coupled receptor** with enlarged extracellular domain - between fourth and fifth transmembrane domains, also nucleic acid and antibodies useful for treating inflammation and neurological disease.
DERWENT CLASS: B04 D16
INVENTOR(S): YE, R D
PATENT ASSIGNEE(S): (SCRI) SCRIPPS RES INST
COUNTRY COUNT: 73
PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG
WO 9728188	A1	19970807	(199737)*	EN	54
RW: AT BE CH DE DK EA ES FI FR GB GR IE IT KE LS LU MC MW NL OA PT SD SE SZ UG					
W: AL AM AT AU AZ BB BG BR BY CA CH CN CU CZ DE DK EE ES FI GB GE HU IL IS JP KE KG KP KR KZ LK LR LS LT LU LV MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK TJ TM TR TT UA UG US UZ VN					
AU 9722560	A	19970822	(199801)		
EP 948536	A1	19991013	(199947)	EN	
R: AL AT BE CH DE DK ES FI FR GB GR IE IT LI LT LU LV MC NL PT RO SE SI					

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
WO 9728188	A1	WO 1997-US1736	19970130
AU 9722560	A	AU 1997-22560	19970130
		WO 1997-US1736	19970130
EP 948536	A1	EP 1997-905736	19970130
		WO 1997-US1736	19970130

FILING DETAILS:

PATENT NO	KIND		PATENT NO
AU 9722560	A	Based on	WO 9728188
EP 948536	A1	Based on	WO 9728188

PRIORITY APPLN. INFO: US 1996-10808 19960130

AB WO 9728188 A UPAB: 19991122

A **G protein-coupled receptor** (A) with an enlarged extracellular **loop** between the fourth and fifth transmembrane domains is new. The protein optionally further comprises glutathione-S-transferase or maltose binding protein. Also claimed are: (1) isolated nucleic acid encoding (A) and selectively hybridising nucleic acid, (2) expression vector comprising the nucleic acid, (3) cells transformed by the vector, (4) transgenic animals generated from the transformed cells, (5) antibody specifically binding to (A). Diseases or conditions mediated by (A) are treated by administering reagents which **modulate** activity of the receptor.

USE - Diseases or conditions mediated by (A) can be treated by administering reagents such as nucleic acid encoding (A), antisense nucleic acid or antibodies to (A). The nucleic acid, for example, can enhance (A) expression or allow expression in non-expressing tissues e.g. to stimulate phagocytosis (claimed), whilst antisense molecules can inhibit gene transcription, preventing adverse activities of the receptor e.g. contraction of smooth muscle. Reagents may also comprise a molecule binding to (A) but not transmitting a signal across the cell membrane or competing for binding with/reducing effectiveness of binding of the natural ligand of (A). The reagent may also alter the interaction of the receptor with the G protein with which it naturally reacts e.g. by altering phosphorylation sites in **intracellular** domains of (A). Inflammatory diseases or conditions mediated by (A) which can be treated include asthma, chronic obstructive pulmonary disease, cystic fibrosis, sinusitis, rhinitis, atherosclerosis, glomerulonephritis, multiple sclerosis and inflammatory bowel disease. Also neurological disorders and obesity can be treated. The antibody can also be used to diagnose these diseases e.g. in brain tissue from patients with suspected neurological

disease, especially Alzheimer's, in skin samples especially from patients with a suspected inflammatory disease or in haematopoietic cells. (I) (or fragments of at least 15 nucleotides) can be used to detect selectively hybridising nucleic acid. The nucleic acids are also useful in screening for compounds **modulating** (A) gene expression by standard assays. Transgenic animals expressing (A) provide model systems for the study of conditions or diseases that are caused/exacerbated by the binding of the receptor, and for the development of therapeutic agents.
Dwg.0/4

File Registry

any amino acid

```
=> d que l14; d que l16; d que l27
L13      512756 SEA FILE=REGISTRY ABB=ON  .[RKH][RKH][ILMFPYWVAGPST]./SQSP
L14         671 SEA FILE=REGISTRY ABB=ON  L13 AND 5/SQL


L16        6602 SEA FILE=REGISTRY ABB=ON  [GK][RKH][RKH]A[KRE]/SQSP
```

not Asp

```
L15      192994 SEA FILE=REGISTRY ABB=ON  [-D]RY/SQSP
L27        2045 SEA FILE=REGISTRY ABB=ON  L15 AND SQL<11


=> fil hcapl; d que l29; d que l33; d que l34; s (l29 or l33 or l34) not l12
FILE 'HCAPLUS' ENTERED AT 16:11:24 ON 02 JUL 2001
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.
COPYRIGHT (C) 2001 AMERICAN CHEMICAL SOCIETY (ACS)
```



```
FILE COVERS 1947 - 2 Jul 2001  VOL 135 ISS 2
FILE LAST UPDATED: 1 Jul 2001  (20010701/ED)

 This file contains CAS Registry Numbers for easy and accurate
 substance identification.

 This file supports REG1stRY for direct browsing and searching of
 all substance data from the REGISTRY file.  Enter HELP FIRST for
 more information.

HCAplus now provides online access to patents and literature covered
in CA from 1947 to the present.  On April 22, 2001, bibliographic
information and abstracts were added for over 2.2 million references
published in CA from 1947 to 1966.


L1        23092 SEA FILE=HCAPLUS ABB=ON  G PROTEIN-COUPLED RECEPTORS+NT/CT
L2         2615 SEA FILE=HCAPLUS ABB=ON  G PROTEIN-COUPLED RECEPTORS+OLD/CT
L3        14691 SEA FILE=HCAPLUS ABB=ON  SCREENING/CW
L4          346 SEA FILE=HCAPLUS ABB=ON  (L1 OR L2) AND L3
L13      512756 SEA FILE=REGISTRY ABB=ON  .[RKH][RKH][ILMFPYWVAGPST]./SQSP
L14         671 SEA FILE=REGISTRY ABB=ON  L13 AND 5/SQL
L15      192994 SEA FILE=REGISTRY ABB=ON  [-D]RY/SQSP
L16        6602 SEA FILE=REGISTRY ABB=ON  [GK][RKH][RKH]A[KRE]/SQSP
L19         306 SEA FILE=HCAPLUS ABB=ON  L14
L20        3574 SEA FILE=HCAPLUS ABB=ON  L16
L27        2045 SEA FILE=REGISTRY ABB=ON  L15 AND SQL<11
L28        1158 SEA FILE=HCAPLUS ABB=ON  L27
L29          14 SEA FILE=HCAPLUS ABB=ON  (L19 OR L20 OR L28) AND L4


L1        23092 SEA FILE=HCAPLUS ABB=ON  G PROTEIN-COUPLED RECEPTORS+NT/CT
```

```
L2          2615 SEA FILE=HCAPLUS ABB=ON  G PROTEIN-COUPLED RECEPTORS+OLD/CT
L5         35567 SEA FILE=HCAPLUS ABB=ON  AGONIST#/OBI
L9         65178 SEA FILE=HCAPLUS ABB=ON  ANTAGONIST#/OBI
L13       512756 SEA FILE=REGISTRY ABB=ON  .[RKH][RKH][ILMFPYWVAGPST]./SQSP
L14          671 SEA FILE=REGISTRY ABB=ON  L13 AND 5/SQL
L15       192994 SEA FILE=REGISTRY ABB=ON  [-D]RY/SQSP
L16         6602 SEA FILE=REGISTRY ABB=ON  [GK][RKH][RKH]A[KRE]/SQSP
L19          306 SEA FILE=HCAPLUS ABB=ON  L14
L20         3574 SEA FILE=HCAPLUS ABB=ON  L16
L23        90600 SEA FILE=HCAPLUS ABB=ON  MODULAT?/OBI
L24         2823 SEA FILE=HCAPLUS ABB=ON  (L5 OR L9 OR L23) AND (L1 OR L2)
L27         2045 SEA FILE=REGISTRY ABB=ON  L15 AND SQL<11
L28         1158 SEA FILE=HCAPLUS ABB=ON  L27
L31       168305 SEA FILE=HCAPLUS ABB=ON  INTRACELLULAR OR INTRA CELLULAR
L32       101974 SEA FILE=HCAPLUS ABB=ON  LOOP#
L33            4 SEA FILE=HCAPLUS ABB=ON  (L19 OR L20 OR L28) AND L24 AND (L31
                 OR L32)


L1          23092 SEA FILE=HCAPLUS ABB=ON  G PROTEIN-COUPLED RECEPTORS+NT/CT
L2          2615 SEA FILE=HCAPLUS ABB=ON  G PROTEIN-COUPLED RECEPTORS+OLD/CT
L5         35567 SEA FILE=HCAPLUS ABB=ON  AGONIST#/OBI
L9         65178 SEA FILE=HCAPLUS ABB=ON  ANTAGONIST#/OBI
L13       512756 SEA FILE=REGISTRY ABB=ON  .[RKH][RKH][ILMFPYWVAGPST]./SQSP
L14          671 SEA FILE=REGISTRY ABB=ON  L13 AND 5/SQL
L15       192994 SEA FILE=REGISTRY ABB=ON  [-D]RY/SQSP
L16         6602 SEA FILE=REGISTRY ABB=ON  [GK][RKH][RKH]A[KRE]/SQSP
L19          306 SEA FILE=HCAPLUS ABB=ON  L14
L20         3574 SEA FILE=HCAPLUS ABB=ON  L16
L23        90600 SEA FILE=HCAPLUS ABB=ON  MODULAT?/OBI
L27         2045 SEA FILE=REGISTRY ABB=ON  L15 AND SQL<11
L28         1158 SEA FILE=HCAPLUS ABB=ON  L27
L34           16 SEA FILE=HCAPLUS ABB=ON  (L1 OR L2)(L)(L5 OR L9 OR L23) AND
                 (L19 OR L20 OR L28)


L84           31 (L29 OR L33 OR L34) NOT L12
```

previously printed

```
=> fil uspat; d que 143; d que 149; d que 153; s 143 or 149 or153
FILE 'USPATFULL' ENTERED AT 16:11:57 ON 02 JUL 2001
CA INDEXING COPYRIGHT (C) 2001 AMERICAN CHEMICAL SOCIETY (ACS)

FILE COVERS 1971 TO PATENT PUBLICATION DATE: 28 Jun 2001 (20010628/PD)
FILE LAST UPDATED: 28 Jun 2001 (20010628/ED)
HIGHEST GRANTED PATENT NUMBER: US6249914
HIGHEST APPLICATION PUBLICATION NUMBER: US2001005910
CA INDEXING IS CURRENT THROUGH 28 Jun 2001 (20010628/UPCA)
ISSUE CLASS FIELDS (/INCL) CURRENT THROUGH: 28 Jun 2001 (20010628/PD)
REVISED CLASS FIELDS (/NCL) LAST RELOADED: Apr 2001
USPTO MANUAL OF CLASSIFICATIONS THESAURUS ISSUE DATE: Apr 2001

>>> Page images are available for patents from 1/1/1998.  Patents   <<<
>>> and applications are typically loaded on the day of publication.<<<
>>> Page images are available for display by the following day.     <<<
>>> Image data for the /FA field are available the following update.<<<

>>> Complete CA file indexing for chemical patents (or equivalents) <<<
>>> is included in file records.  A thesaurus is available for the  <<<
>>> USPTO Manual of Classifications in the /NCL, /INCL, and /RPCL   <<<
```

>>> fields. This thesaurus includes catchword terms from the <<<
>>> USPTO/MOC subject headings and subheadings. Thesauri are also <<<
>>> available for the WIPO International Patent Classification <<<
>>> (IPC) Manuals, editions 1-6, in the /IC1, /IC2, /IC3, /IC4, <<<
>>> /IC5, and /IC (/IC6) fields, respectively. The thesauri in <<<
>>> the /IC5 and /IC fields include the corresponding catchword <<<
>>> terms from the IPC subject headings and subheadings. <<<

This file contains CAS Registry Numbers for easy and accurate substance identification.

```
L13      512756 SEA FILE=REGISTRY ABB=ON  .[RKH][RKH][ILMFPYWVAGPST]./SQSP
L14         671 SEA FILE=REGISTRY ABB=ON  L13 AND 5/SQL
L15      192994 SEA FILE=REGISTRY ABB=ON  [-D]RY/SQSP
L16        6602 SEA FILE=REGISTRY ABB=ON  [GK][RKH][RKH]A[KRE]/SQSP
L27        2045 SEA FILE=REGISTRY ABB=ON  L15 AND SQL<11
L35          47 SEA FILE=USPATFULL ABB=ON  L14
L36         415 SEA FILE=USPATFULL ABB=ON  L16
L37         179 SEA FILE=USPATFULL ABB=ON  L27
L38         861 SEA FILE=USPATFULL ABB=ON  G PROTEIN COUPLED(2A)RECEPTOR#
L40       18156 SEA FILE=USPATFULL ABB=ON  INTRACELLULAR OR INTRA CELLULAR
L41      296113 SEA FILE=USPATFULL ABB=ON  LOOP#
L42         363 SEA FILE=USPATFULL ABB=ON  (L38 (P)(L40 OR L41))
L43          12 SEA FILE=USPATFULL ABB=ON  ((L35 OR L36 OR L37)) AND L42


L13      512756 SEA FILE=REGISTRY ABB=ON  .[RKH][RKH][ILMFPYWVAGPST]./SQSP
L14         671 SEA FILE=REGISTRY ABB=ON  L13 AND 5/SQL
L15      192994 SEA FILE=REGISTRY ABB=ON  [-D]RY/SQSP
L16        6602 SEA FILE=REGISTRY ABB=ON  [GK][RKH][RKH]A[KRE]/SQSP
L27        2045 SEA FILE=REGISTRY ABB=ON  L15 AND SQL<11
L35          47 SEA FILE=USPATFULL ABB=ON  L14
L36         415 SEA FILE=USPATFULL ABB=ON  L16
L37         179 SEA FILE=USPATFULL ABB=ON  L27
L38         861 SEA FILE=USPATFULL ABB=ON  G PROTEIN COUPLED(2A)RECEPTOR#
L45      214341 SEA FILE=USPATFULL ABB=ON  ?AGONIST? OR MODULAT?
L49          12 SEA FILE=USPATFULL ABB=ON  ((L35 OR L36 OR L37)) AND L45(P)L38


L13      512756 SEA FILE=REGISTRY ABB=ON  .[RKH][RKH][ILMFPYWVAGPST]./SQSP
L14         671 SEA FILE=REGISTRY ABB=ON  L13 AND 5/SQL
L15      192994 SEA FILE=REGISTRY ABB=ON  [-D]RY/SQSP
L16        6602 SEA FILE=REGISTRY ABB=ON  [GK][RKH][RKH]A[KRE]/SQSP
L27        2045 SEA FILE=REGISTRY ABB=ON  L15 AND SQL<11
L35          47 SEA FILE=USPATFULL ABB=ON  L14
L36         415 SEA FILE=USPATFULL ABB=ON  L16
L37         179 SEA FILE=USPATFULL ABB=ON  L27
L38         861 SEA FILE=USPATFULL ABB=ON  G PROTEIN COUPLED(2A)RECEPTOR#
L51        2004 SEA FILE=USPATFULL ABB=ON  DRUG SCREENING
L53          10 SEA FILE=USPATFULL ABB=ON  L51 AND ((L35 OR L36 OR L37)) AND
                L38
```

MISSING OPERATOR L49 OR L53

```
=> s l43 or l49 or l53
```

L85 13 L43 OR L49 OR L53

=> dup rem l84,l85
FILE 'HCAPLUS' ENTERED AT 16:12:23 ON 02 JUL 2001
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.

FILE 'USPATFULL' ENTERED AT 16:12:23 ON 02 JUL 2001

PROCESSING COMPLETED FOR L84
PROCESSING COMPLETED FOR L85
L86 44 DUP REM L84 L85 (0 DUPLICATES REMOVED)
ANSWERS '1-31' FROM FILE HCAPLUS
ANSWERS '32-44' FROM FILE USPATFULL

=> d ibib ab hitrn l86 1-44; fil hom

L86 ANSWER 1 OF 44 HCAPLUS COPYRIGHT 2001 ACS
ACCESSION NUMBER: 2001:380772 HCAPLUS
DOCUMENT NUMBER: 135:15774
TITLE: Variants of alternative splicing in human and murine gene expression
INVENTOR(S): Levine, Zurit; David, Anat; Azar, Idit; Khosravi, Rami; Bernstein, Jeanne
PATENT ASSIGNEE(S): Compugen Ltd., Israel
SOURCE: PCT Int. Appl., 519 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001036632	A2	20010525	WO 2000-IL766	20001117

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

PRIORITY APPLN. INFO.: IL 1999-132978 A 19991117
IL 1999-133455 A 19991210

AB The present invention concerns novel variants, amino acid and nucleic acid sequences obtained by alternative splicing of known human and murine sequences, expression vectors and host cells contg. the variants' nucleic acid sequence, and antibodies reactive with the variants' products. The variants are naturally occurring sequences resulting from alternative splicing of genes and not merely truncated, mutated or fragmented forms of known sequences which are artificially produced. Eighty-seven novel spliced cDNA and protein sequences are provided. The invention also concerns pharmaceutical compns. contg. any of the above as well as methods of detection. A preferred example is the angiotensin converting enzyme (ACE) variant.

IT **342058-52-0**
RL: PRP (Properties)
(Unclaimed; variants of alternative splicing in human and murine gene

expression)

IT **341569-36-6 341569-37-7 341569-38-8**
341569-39-9 341569-44-6 341569-72-0
RL: ANT (Analyte); BOC (Biological occurrence); PRP (Properties); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); OCCU (Occurrence); USES (Uses)
(amino acid sequence; variants of alternative splicing in human and murine gene expression)

IT **160613-16-1 342058-28-0 342058-29-1**
342058-30-4 342058-35-9
RL: PRP (Properties)
(unclaimed protein sequence; variants of alternative splicing in human and murine gene expression)

L86 ANSWER 2 OF 44 HCAPLUS COPYRIGHT 2001 ACS
ACCESSION NUMBER: 2001:360265 HCAPLUS
DOCUMENT NUMBER: 134:363630
TITLE: A system for cell-based screening
INVENTOR(S): Ghosh, Richik N.; Debiasio, Richard; Chen, Yih-Tai; Bellutta, Paolo; Giuliano, Kenneth; Pasley, Jefferson W.
PATENT ASSIGNEE(S): Cellomics, Inc., USA
SOURCE: PCT Int. Appl., 155 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001035072	A2	20010517	WO 2000-US30896	20001109

W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

PRIORITY APPLN. INFO.: US 1999-164353 P 19991109
US 2000-176504 P 20000118

AB The present invention provides methods, computer readable storage medium, and kits for cell state identification in cells, where the method includes providing arrays of cells that possess luminescently labeled cell identification and cell state reporter mols. that have distinguishable luminescent emission spectra; imaging the cells to obtain luminescent signals from the cell identification and the cell state reporter mols.; converting the luminescent signals into digital data to create a mask of the cell identification reporter mol. and the cell state reporter mols.; and detg. the intensity of the cell state reporter mol. mask that co-localizes with the cell identification reporter mol. mask to identify the cell as being in a particular physiol. state. For a screening assay for compds. that induce nuclear translocation of transcription factor, a human cell line was plated in 96 well microtiter plates. Some rows of wells were titrated with agonist, a known inducer of a specific nuclear transcription factor. The cells were then fixed and stained by std. methods with a fluorescein-labeled antibody to the transcription factor, and with Hoechst 33423. The cell-based screening system was used to acquire and analyze images from this plate and the NucCyt Difference was

found to be strongly correlated with the amt. of agonist added to the wells.

IT **292140-90-0**
RL: PRP (Properties)
(unclaimed sequence; system for cell-based screening)

L86 ANSWER 3 OF 44 HCAPLUS COPYRIGHT 2001 ACS
ACCESSION NUMBER: 2001:320098 HCAPLUS
DOCUMENT NUMBER: 134:337393
TITLE: Drosophila G protein-coupled receptors and cDNAs and methods for screening for modulators of these receptors
INVENTOR(S): Lowery, David E.; Smith, Valdin G.; Kubiak, Teresa A.; Larsen, Martha J.
PATENT ASSIGNEE(S): Pharmacia + Upjohn Co., USA
SOURCE: PCT Int. Appl., 110 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001031005	A2	20010503	WO 2000-US29002	20001020

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

PRIORITY APPLN. INFO.: US 1999-425676 A2 19991022
AB The present invention provides Drosophila melanogaster GPCR (DmGPCR) polypeptides and cDNAs which identify and encode such a DmGPCR. In addn., the invention provides expression vectors, host cells and methods for its prodn. The invention also provides methods for the identification of homologs in other animals, and of DmGPCR agonists/antagonists, useful for the treatment of diseases in animals and for the control of insects that are injurious of harmful to plants or animals.
IT **337312-39-7**
RL: ARG (Analytical reagent use); PRP (Properties); ANST (Analytical study); USES (Uses)
(GPCR6 ligand; Drosophila G protein-coupled receptors and cDNAs and methods for screening for modulators of these receptors)

L86 ANSWER 4 OF 44 HCAPLUS COPYRIGHT 2001 ACS
ACCESSION NUMBER: 2001:185796 HCAPLUS
DOCUMENT NUMBER: 134:234719
TITLE: Mammalian T2R family of taste receptors
INVENTOR(S): Zuker, Charles S.; Adler, Jon Elliot; Ryba, Nick; Mueller, Ken; Hoon, Mark
PATENT ASSIGNEE(S): Regents of the University of California, USA; Government of the United States of America, as Represented by the Secretary,
SOURCE: PCT Int. Appl., 249 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English

Searched by Barb O'Bryen, STIC 308-4291

FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001018050	A2	20010315	WO 2000-US24821	20000908

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

PRIORITY APPLN. INFO.: US 1999-393634 A 19990910
US 2000-510332 A 20000222

AB The invention provides nucleic acid and amino acid sequences for a novel family of taste transduction G-protein coupled receptors, designated T2R, from Drosophila melanogaster. In particular, members of this family are involved in the detection of bitter tastes. Fifty human, 14 rat, and 31 mouse T2R members are provided. Individual receptor cells express multiple T2R receptors, and the T2R genes are selectively expressed in gustducin-expressing cells. T2Rs couple to gustducin, and T2Rs are also expressed in conjunction with G.alpha.15, a G protein .alpha.-subunit. Antibodies to such receptors, methods of detecting such nucleic acids and receptors, and methods of screening for modulators of taste transduction G-protein coupled receptors are also provided.

IT **330000-35-6 330000-42-5**
RL: ARU (Analytical role, unclassified); BAC (Biological activity or effector, except adverse); BOC (Biological occurrence); PRP (Properties); ANST (Analytical study); BIOL (Biological study); OCCU (Occurrence)
(amino acid sequence; mammalian T2R family of taste receptors)

L86 ANSWER 5 OF 44 HCAPLUS COPYRIGHT 2001 ACS
ACCESSION NUMBER: 2001:101309 HCAPLUS
DOCUMENT NUMBER: 134:173895
TITLE: Protein and cDNA sequences encoding G protein-coupled receptor 15571, which is related to the secretin-like family, and uses thereof in drug screening, diagnostic, and therapeutic applications
INVENTOR(S): Hodge, Martin R.; Lloyd, Clare; Weich, Nadine S.
PATENT ASSIGNEE(S): Millennium Pharmaceuticals, Inc., USA
SOURCE: PCT Int. Appl., 145 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001009328	A1	20010208	WO 2000-US21278	20000803

W: AE, AG, AL, AM, AT, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, CZ, DE, DE, DK, DK, DM, DZ, EE, EE, ES, FI, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY,

DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ,
CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
PRIORITY APPLN. INFO.: US 1999-146916 P 19990803
US 2000-515781 A 20000229

AB The invention provides protein and cDNA sequences encoding a novel G protein-coupled receptor (15571), which is a new member of the secretin-like family. The invention further relates to methods using receptor polypeptides and polynucleotides as a target for diagnosis and treatment in secretin-like receptor-mediated disorders. The invention further relates to drug-screening methods using the receptor polypeptides and polynucleotides to identify agonists and antagonists for diagnosis and treatment. The invention further encompasses agonists and antagonists based on the receptor polypeptides and polynucleotides.

IT **149660-39-9**
RL: PRP (Properties)
(unclaimed protein sequence; protein and cDNA sequences encoding G protein-coupled receptor 15571, which is related to the secretin-like family, and uses thereof in drug screening, diagnostic, and therapeutic applications)

REFERENCE COUNT: 2
REFERENCE(S): (1) Genetics Institute Inc; WO 9845436 A2 1998 HCAPLUS
(2) Robertson; Genomics 1994, V23, P42 HCAPLUS

L86 ANSWER 6 OF 44 HCAPLUS COPYRIGHT 2001 ACS
ACCESSION NUMBER: 2001:31355 HCAPLUS
DOCUMENT NUMBER: 134:99582
TITLE: Remedies for drug-resistant hypercalcemia
INVENTOR(S): Saito, Hidemi; Tsunenari, Toshiaki; Onuma, Etsuro
PATENT ASSIGNEE(S): Chugai Seiyaku Kabushiki Kaisha, Japan
SOURCE: PCT Int. Appl., 118 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001002012	A1	20010111	WO 2000-JP4523	20000706

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
PRIORITY APPLN. INFO.: JP 1999-192270 A 19990706

AB Remedies for drug-resistant hypercalcemia which contain as the active ingredient a substance inhibiting the binding of a parathyroid hormone-related peptide to its receptor. Therapeutics for drug-resistant hypercalcemia include bone resorption inhibitor (e.g. bisphosphates and/or calcitonin), calcium excretion promoter, intestinal calcium absorption inhibitor, or **loop** diuretic. The PTHrP and receptor-binding inhibitors are PTHrP receptor antagonist such as anti-PTHrP antibodies or fragments or chimeric antibodies.

IT **205869-45-0**
RL: PRP (Properties)
(Unclaimed; remedies for drug-resistant hypercalcemia)

REFERENCE COUNT: 48

REFERENCE(S): (2) Cell Genesys Inc; US 6075181 A HCAPLUS
(3) Cell Genesys Inc; EP 822830 A1 HCAPLUS
(4) Cell Genesys Inc; AU 9656322 A HCAPLUS
(6) Cell Genesys Inc; WO 9633735 A1 1996 HCAPLUS
(7) Chugai Pharmaceutical Co Ltd; EP 1004313 A1 HCAPLUS
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L86 ANSWER 7 OF 44 HCAPLUS COPYRIGHT 2001 ACS
ACCESSION NUMBER: 2001:31354 HCAPLUS
DOCUMENT NUMBER: 134:110951
TITLE: Remedies for diseases caused by PTH or PTHrP
INVENTOR(S): Ogata, Etsuro; Sato, Koh; Onuma, Etsuro; Tsunenari, Toshiaki; Saito, Hidemi; Azuma, Yumiko
PATENT ASSIGNEE(S): Chugai Seiyaku Kabushiki Kaisha, Japan
SOURCE: PCT Int. Appl., 130 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001002011	A1	20010111	WO 2000-JP4414	20000703

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

PRIORITY APPLN. INFO.: JP 1999-189793 A 19990702
AB Provided are remedies for diseases caused by PTH or PTHrP. These remedies contain, as the active ingredient, an agonist or an antagonist binding to PTH receptor or PTHrP receptor or a substance binding to a ligand of such a receptor to thereby promote or inhibit the binding of the ligand to the receptor.
IT **205869-45-0**
RL: PRP (Properties)
(unclaimed sequence; remedies for diseases caused by PTH or PTHrP)
REFERENCE COUNT: 62
REFERENCE(S): (1) Asahi Chemical Industry Co Ltd; JP 11222440 A 1999 HCAPLUS
(3) Cell Genesys Inc; US 6075181 A HCAPLUS
(4) Cell Genesys Inc; EP 822830 A1 HCAPLUS
(5) Cell Genesys Inc; AU 9656322 A HCAPLUS
(7) Cell Genesys Inc; WO 9633735 A1 1996 HCAPLUS
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L86 ANSWER 8 OF 44 HCAPLUS COPYRIGHT 2001 ACS
ACCESSION NUMBER: 2001:31353 HCAPLUS
DOCUMENT NUMBER: 134:114837
TITLE: Agents for ameliorating low vasopressin level
INVENTOR(S): Ogata, Etsuro; Onuma, Etsuro; Tsunenari, Toshiaki; Saito, Hidemi; Azuma, Yumiko
PATENT ASSIGNEE(S): Chugai Seiyaku Kabushiki Kaisha, Japan
SOURCE: PCT Int. Appl., 114 pp.
CODEN: PIXXD2

Searched by Barb O'Bryen, STIC 308-4291

DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001002010	A1	20010111	WO 2000-JP4413	20000703

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

PRIORITY APPLN. INFO.: JP 1999-189322 A 19990702

AB Agents for ameliorating low vasopressin level which contain as the active ingredient a substance capable of inhibiting the binding of a parathyroid hormone-assocd. peptide to its receptor; and agents for ameliorating symptoms caused by a decrease in vasopressin level which contain as the active ingredient a substance capable of inhibiting the binding of a parathyroid hormone-assocd. peptide to its receptor.

IT **205869-45-0**
RL: PRP (Properties)
(unclaimed sequence; agents for ameliorating low vasopressin level)

REFERENCE COUNT: 17
REFERENCE(S):
(1) Chugai Pharmaceutical Co Ltd; JP 11-92500 A HCAPLUS
(2) Chugai Pharmaceutical Co Ltd; EP 962467 A1 HCAPLUS
(3) Chugai Pharmaceutical Co Ltd; WO 9813388 A1 1998 HCAPLUS
(4) Kanegafuchi Chem Ind Co Ltd; JP 04228089 A 1992 HCAPLUS
(5) Merck & Co Inc; EP 293160 A2 HCAPLUS
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L86 ANSWER 9 OF 44 HCAPLUS COPYRIGHT 2001 ACS
ACCESSION NUMBER: 2001:93327 HCAPLUS
DOCUMENT NUMBER: 134:335976
TITLE: Protease-Activated Receptor-2 (PAR-2): Structure-Function Study of Receptor Activation by Diverse Peptides Related to Tethered-Ligand Epitopes
AUTHOR(S): Maryanoff, Bruce E.; Santulli, Rosemary J.; McComsey, David F.; Hoekstra, William J.; Hoey, Kenway; Smith, Charles E.; Addo, Michael; Darrow, Andrew L.; Andrade-Gordon, Patricia
CORPORATE SOURCE: Drug Discovery, The R. W. Johnson Pharmaceutical Research Institute, Spring House, PA, 19477, USA
SOURCE: Arch. Biochem. Biophys. (2001), 386(2), 195-204
CODEN: ABBIA4; ISSN: 0003-9861
PUBLISHER: Academic Press
DOCUMENT TYPE: Journal
LANGUAGE: English

AB Protease-activated receptor-2 (PAR-2) is a tethered-ligand, G-protein-coupled receptor that is activated by proteolytic cleavage or by small peptides derived from its cleaved N-terminal sequence, such as SLIGRL-NH2. To assess specific PAR activity, we developed an immortalized murine PAR-1 (-/-) cell line transfected with either human PAR-2 or PAR-1. A "directed" library of more than 100 PAR agonist peptide analogs was

synthesized and evaluated for PAR-2 and PAR-1 activity to establish an in-depth structure-function profile for specific action on PAR-2. The most potent agonist peptides (EC50 = 2-4 .mu.M) had Lys at position 6, Ala at position 4, and pFPhe at position 2; however, these also exhibited potent PAR-1 activity (EC50 = 0.05-0.35 .mu.M). We identified SLIARK-NH2 and SL-Cha-ARL-NH2 as relatively potent, highly selective PAR-2 agonists with EC50 values of 4 .mu.M. Position 1 did not tolerate basic, acidic, or large hydrophobic amino acids. N-Terminal capping by acetyl eliminated PAR-2 activity, although removal of the amino group reduced potency by just 4-fold. At position 2, substitution of Leu by Cha or Phe gave equiv. PAR-2 potency, but this modification also activated PAR-1, whereas Ala, Asp, Lys, or Gln abolished PAR-2 activity; at position 3, Ile and Cha were optimal, although various amino acids were tolerated; at position 4, Ala or Cha increased PAR-2 potency 2-fold, although Cha introduced PAR-1 activity; at position 5, Arg or Lys could be replaced successfully by large hydrophobic amino acids. These results with hexapeptide C-terminal amides that mimic the native PAR-2 ligand indicate structural modes for obtaining optimal PAR-2 activity, which could be useful for the design of PAR-2 antagonists. (c) 2001 Academic Press.

IT **337523-23-6**
RL: BAC (Biological activity or effector, except adverse); BPR (Biological process); BIOL (Biological study); PROC (Process)
(PAR-2 and PAR-1 activity of agonist peptide analogs)

REFERENCE COUNT: 56
REFERENCE(S):
(1) Ahn, H; Mol Pharmacol 1997, V51, P350 HCAPLUS
(2) Al-Ani, B; J Pharmacol Exp Ther 1999, V290, P753 HCAPLUS
(3) Andrade-Gordon, P; Proc Natl Acad Sci USA 1999, V96, P12257 HCAPLUS
(4) Blackhart, B; J Biol Chem 1996, V271, P16466 HCAPLUS
(6) Bono, F; Biochem Biophys Res Commun 1997, V241, P762 HCAPLUS
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L86 ANSWER 10 OF 44 HCAPLUS COPYRIGHT 2001 ACS
ACCESSION NUMBER: 2000:900808 HCAPLUS
DOCUMENT NUMBER: 134:67180
TITLE: Taste receptor genes in the Drosophila melanogaster genome
INVENTOR(S): Carlson, Peter J.; Clyne, Peter J.; Warr, Coral G.
PATENT ASSIGNEE(S): Yale University, USA
SOURCE: PCT Int. Appl., 227 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000077208	A2	20001221	WO 2000-US16211	20000614
WO 2000077208	A3	20010301		

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ,

CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
PRIORITY APPLN. INFO.: US 1999-138668 P 19990614
US 2000-181704 P 20000210

AB The present invention provides nucleic acids and amino acids for novel gustatory receptors as well as methods for identifying gustatory receptors. More specifically, the present invention provides nucleic acids and amino acids for novel gustatory receptors in Drosophila as well as methods of using the provided nucleic acids and amino acids. A large and diverse family of seven transmembrane domain proteins was identified from the Drosophila genome database with a computer algorithm that identifies proteins on the basis of structure. Eighteen of 19 genes examd. were expressed in the Drosophila labellum, a gustatory organ of the proboscis, and expression was not detected in a variety of other tissues nor in the labellum of a Drosophila mutant (pox-neuro 70) in which taste neurons are eliminated. Tissue specificity of expression of these genes, along with their structural similarity, supports the possibility that the family encodes a large and divergent family of taste receptors. In addn., this invention provides methods of identifying ligands which bind to the novel gustatory receptors as well as a variety of methods for using the receptors and ligands so identified.

IT **267869-62-5**, Taste receptor 58A.2 (Drosophila)
RL: BOC (Biological occurrence); BUU (Biological use, unclassified); PRP (Properties); BIOL (Biological study); OCCU (Occurrence); USES (Uses)
(amino acid sequence; taste receptor genes in the Drosophila melanogaster genome)

L86 ANSWER 11 OF 44 HCAPLUS COPYRIGHT 2001 ACS
ACCESSION NUMBER: 2000:842175 HCAPLUS
DOCUMENT NUMBER: 134:14036
TITLE: Human seven-transmembrane receptors and their encoding cDNA sequences and diagnostic and therapeutic applications
INVENTOR(S): Ruben, Steven M.; Ni, Jian; Soppet, Daniel R.; Li, Yi; Fan, Ping
PATENT ASSIGNEE(S): Human Genome Sciences, Inc., USA
SOURCE: PCT Int. Appl., 288 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000071584	A1	20001130	WO 2000-US13737	20000519

W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
PRIORITY APPLN. INFO.: US 1999-135167 P 19990520
US 1999-143616 P 19990713
US 1999-152934 P 19990909
US 2000-189029 P 20000314

AB The present invention relates to 7 novel human 7TM polypeptides (also known as G protein-coupled receptors) and isolated cDNAs contg. the coding regions of the genes encoding such polypeptides. Protein homologies,

domain structures, tissue expression patterns, and chromosomal mapping are provided for each of the 7 genes. Also provided are vectors, host cells, antibodies, and recombinant methods for producing human 7TM polypeptides. The invention further relates to diagnostic and therapeutic methods useful for diagnosing and treating disorders related to these novel human 7TM polypeptides.

IT **309305-98-4P**
RL: BOC (Biological occurrence); BPN (Biosynthetic preparation); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); OCCU (Occurrence); PREP (Preparation); USES (Uses)
(amino acid sequence; human seven-transmembrane receptors and their encoding cDNA sequences and diagnostic and therapeutic applications)

REFERENCE COUNT: 4
REFERENCE(S):
(1) Raming; Nature 1993, V361, P353 HCAPLUS
(2) Ruat; Proceedings of the National Academy of Science 1993, V90, P8547 HCAPLUS
(3) Vanderhaeghen; Biochemical and Biophysical Research Comunications 1997, V237(2), P283 HCAPLUS
(4) Young; Proceedings of the National Academy of Science 1988, V85, P5339 HCAPLUS

L86 ANSWER 12 OF 44 HCAPLUS COPYRIGHT 2001 ACS
ACCESSION NUMBER: 2000:608905 HCAPLUS
DOCUMENT NUMBER: 133:188908
TITLE: Protein and cDNA sequences encoding human and mouse G protein-coupled receptors (14273 receptors), and uses thereof in drug screening assays and diagnostic and therapeutic applications
INVENTOR(S): Glucksmann, Maria Alexandra; Tsai, Fong-ying
PATENT ASSIGNEE(S): Millenium Pharmaceuticals, Inc., USA
SOURCE: PCT Int. Appl., 105 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000050596	A2	20000831	WO 2000-US5068	20000228
WO 2000050596	A3	20001221		

W: AE, AL, AM, AT, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, CZ, DE, DE, DK, DK, DM, EE, EE, ES, FI, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

PRIORITY APPLN. INFO.: US 1999-261599 A 19990226
US 1999-456455 A 19991208

AB The present invention provides protein and cDNA sequences of a newly identified receptor belonging to the superfamily of G-protein-coupled receptors (14273 receptors). The invention further relates to methods using the 14273 receptor as a target for diagnosis and treatment in receptor-mediated disorders, specifically, cardiovascular diseases, including congestive heart failure. The invention further relates to drug-screening methods using the 14273 receptor to identify agonists and antagonists for diagnosis and treatment. The invention further encompasses agonists and antagonists based on the 14273 receptor. The

invention further relates to procedures for producing the 14273 receptors.

IT **289067-83-0DP**, subfragments are claimed
RL: BOC (Biological occurrence); BPN (Biosynthetic preparation); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); OCCU (Occurrence); PREP (Preparation); USES (Uses)
(amino acid sequence; protein and cDNA sequences encoding human and mouse G protein-coupled receptors (14273 receptors), and uses thereof in drug screening assays and diagnostic and therapeutic applications)

L86 ANSWER 13 OF 44 HCAPLUS COPYRIGHT 2001 ACS
ACCESSION NUMBER: 2000:475770 HCAPLUS
DOCUMENT NUMBER: 133:100055
TITLE: Truncated parathormone receptor and screening assay utilizing the same
INVENTOR(S): Gardella, Thomas J.; Kronenberg, Henry M.; Potts, John T., Jr.
PATENT ASSIGNEE(S): The General Hospital Corporation, USA
SOURCE: PCT Int. Appl., 83 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000040698	A1	20000713	WO 1998-US27862	19981231
W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
AU 9920234	A1	20000724	AU 1999-20234	19981231

PRIORITY APPLN. INFO.: WO 1998-US27862 A 19981231

AB The invention provides a novel PTH receptor polypeptide, r.delta.Nt, characterized by a deletion of the extracellular amino-terminus, ligand binding domain of the receptor. Addnl. disclosed are nucleic acid mols. encoding the receptor. The receptor has a minimal domain for ligand binding and is useful in screening assays designed for the identification of agonists and antagonists of PTH receptor activity.

IT **158455-95-9 283182-41-2 283182-42-3**
RL: ARG (Analytical reagent use); BAC (Biological activity or effector, except adverse); PRP (Properties); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(amino acid sequence; truncated parathormone receptor and screening assay utilizing same)

REFERENCE COUNT: 1
REFERENCE(S): (1) Segre; US 5494806 A 1996 HCAPLUS

L86 ANSWER 14 OF 44 HCAPLUS COPYRIGHT 2001 ACS
ACCESSION NUMBER: 2000:457193 HCAPLUS
DOCUMENT NUMBER: 133:84752
TITLE: Preparation and therapeutic uses of PTH functional domain conjugate peptides, derivatives thereof, and novel tethered ligand-receptor molecules
INVENTOR(S): Gardella, Thomas J.; Kronenberg, Henry M.; Potts, John T.; Juppner, Harald

Searched by Barb O'Bryen, STIC 308-4291

PATENT ASSIGNEE(S): USA
SOURCE: PCT Int. Appl., 119 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000039278	A2	20000706	WO 1999-US31108	19991230

W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

PRIORITY APPLN. INFO.: US 1998-114577 P 19981231
OTHER SOURCE(S): MARPAT 133:84752

AB Novel parathyroid hormone (PTH) peptides and analogs thereof of the PTH(1-34) fragments are disclosed that combine the N-terminal signaling domain (residues 1-9) and the C-terminal binding domain (residues 15-31) via a linker. Nucleic acid mols. and peptides for PTH(1-9)-(Gly)5-PTH(15-31)(PG5) and PTH(1-9)-(Gly)7-PTH(15-31) and a novel PTH receptor are disclosed. Addnl., methods of screening for PTH agonists, pharmaceutical compns. and methods of treatment are disclosed.

IT **280786-62-1P**
RL: BPN (Biosynthetic preparation); BPR (Biological process); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); PROC (Process); USES (Uses)
(prepn. and therapeutic uses of PTH functional domain conjugate peptides, derivs. thereof, and novel tethered ligand-receptor mols.)

IT **281242-57-7 281242-59-9 281242-61-3**
RL: PRP (Properties)
(unclaimed protein sequence; prepn. and therapeutic uses of PTH functional domain conjugate peptides, derivs. thereof, and novel tethered ligand-receptor mols.)

L86 ANSWER 15 OF 44 HCAPLUS COPYRIGHT 2001 ACS
ACCESSION NUMBER: 2000:384417 HCAPLUS
DOCUMENT NUMBER: 133:39090
TITLE: Cloning and characterization of parathyroid hormone/parathyroid hormone-related peptide receptor PTH1R and PTH3R from zebrafish
INVENTOR(S): Juppner, Harald; Rubin, David A.
PATENT ASSIGNEE(S): USA
SOURCE: PCT Int. Appl., 111 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000032775	A1	20000608	WO 1999-US28207	19991130

W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL,

IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

PRIORITY APPLN. INFO.: US 1998-110467 P 19981130

AB The present invention relates to novel parathyroid hormone (PTH) and parathyroid hormone related protein (PTHrP) receptors (PTH1R and PTH3R) isolated from zebrafish. The receptors of the present invention share homol. with previously identified parathyroid hormone (PTH)/parathyroid related protein (PTHrP) receptors. Isolated nucleic acid mols. are provided encoding the zebrafish PTH1R and PTH3R receptors. Functional characterization of these receptors by expressing them in COS-7 cells show that zPTH3R interacts preferentially with PTHrP and it is a naturally occurring PTH/PTHrP receptor which appears to be incapable of signaling through inositol phosphate. The occurrence of PTH3R in mammalians is establised by southern blot anal. of mouse genomic DNA. PTH1R and PTH3R receptor polypeptides are also provided, as are vectors, host cells, and methods for expression and purifn. of the recombinant proteins. The invention further relates to screening methods for identifying agonists and antagonists of PTH1R and PTH3R receptor activity and to diagnostic and therapeutic methods.

IT **250711-60-5DP**, subfragments claimed
RL: BPN (Biosynthetic preparation); BPR (Biological process); PRP (Properties); BIOL (Biological study); PREP (Preparation); PROC (Process)
(amino acid sequence; cloning and characterization of parathyroid hormone/parathyroid hormone-related peptide receptor PTH1R and PTH3R from zebrafish)

REFERENCE COUNT: 7
REFERENCE(S):
(1) Gen Hospital Corp; WO 9217602 A 1992 HCAPLUS
(2) JUppner, H; SCIENCE 1991, V254, P1024 HCAPLUS
(3) McCuaig, K; PROC NATL ACAD SCI USA 1994, V91, P5051 HCAPLUS
(6) Rubin, D; J BIOL CHEM 1999, V274(40), P28185 HCAPLUS
(7) Turner, P; J BIOL CHEM 1998, V273(7), P3830 HCAPLUS
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L86 ANSWER 16 OF 44 HCAPLUS COPYRIGHT 2001 ACS
ACCESSION NUMBER: 2000:384409 HCAPLUS
DOCUMENT NUMBER: 133:27365
TITLE: Cloning and characterization of parathyroid hormone/parathyroid hormone-related peptide receptor PTH1R and PTH3R from zebrafish
INVENTOR(S): Juppner, Harald; Rubin, David A.
PATENT ASSIGNEE(S): USA
SOURCE: PCT Int. Appl., 111 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000032771	A1	20000608	WO 1999-US11883	19990528

W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS,

JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

AU 9942172 A1 20000619 AU 1999-42172 19990528
PRIORITY APPLN. INFO.: US 1998-110467 P 19981130
WO 1999-US11883 W 19990528

AB The present invention relates to novel parathyroid hormone (PTH) and parathyroid hormone related protein (PTHrP) receptors (PTH1R and PTH3R) isolated from zebrafish. The receptors of the present invention share homol. with previously identified parathyroid hormone (PTH)/parathyroid related protein (PTHrP) receptors. Isolated nucleic acid mols. are provided encoding the zebrafish PTH1R and PTH3R receptors. Functional characterization of these receptors by expressing them in COS-7 cells show that zPTH3R interacts preferentially with PTHrP and it is a naturally occurring PTH/PTHrP receptor which appears to be incapable of signaling through inositol phosphate. PTH1R and PTH3R receptor polypeptides are also provided, as are vectors, host cells, and methods for expression and purifn. of the recombinant proteins. The invention further relates to screening methods for identifying agonists and antagonists of PTH1R and PTH3R receptor activity and to diagnostic and therapeutic methods.

IT **250711-60-5DP**, subfragments claimed
RL: BPN (Biosynthetic preparation); BPR (Biological process); PRP (Properties); BIOL (Biological study); PREP (Preparation); PROC (Process)
(amino acid sequence; cloning and characterization of parathyroid hormone/parathyroid hormone-related peptide receptor PTH1R and PTH3R from zebrafish)

REFERENCE COUNT: 2
REFERENCE(S): (1) Gen Hospital Corp; WO 9217602 A 1992 HCAPLUS
(2) JUppner, H; SCIENCE 1991, V254, P1024 HCAPLUS

L86 ANSWER 17 OF 44 HCAPLUS COPYRIGHT 2001 ACS
ACCESSION NUMBER: 2000:260535 HCAPLUS
DOCUMENT NUMBER: 132:290236
TITLE: Constitutively active human G protein-coupled receptors and their use in screening for receptor modulators
INVENTOR(S): Behan, Dominic P.; Chalmers, Derek T.; Liaw, Chen W.
PATENT ASSIGNEE(S): Arena Pharmaceuticals, Inc., USA
SOURCE: PCT Int. Appl., 341 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 4
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000022129	A1	20000420	WO 1999-US23938	19991012

W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

AU 9964307 A1 20000501 AU 1999-64307 19991012
PRIORITY APPLN. INFO.: US 1998-170496 A2 19981013
WO 1999-US23938 W 19991012

AB Disclosed herein are constitutively activated human G protein-coupled receptors (GPCRs) contg. the sequence P1 AA15 X (P1 = an amino acid residue within the transmembrane region 6; AA15 = the amino acids immediately following P1 which may be the same or different than the wild-type sequence; X = an amino acid within the intercellular region 3 which may be Lys, His, Arg, or Ala). In a most preferred embodiment, P1 = proline, AA15 is 15 endogenous amino acid residues following P1, and X = lysine. Also disclosed are nucleic acids encoding the mutant GPCRs, plasmids contg. the nucleic acids, and host cells contg. the plasmids. A algorithmic method for selecting which amino acid to alter to obtain a constitutively active GPCR is presented. Because it is most preferred that the human GPCRs which incorporate these mutations are incorporated into mammalian cells and utilized for the screening of agonists, partial agonists, and inverse agonists, the human GPCR incorporating the mutation need not be purified and isolated per se (i.e., these are incorporated within the cellular membrane of a mammalian cell), although such purified and isolated non-endogenous human GPCRs are well within the purview of this disclosure. A no. of orphan human G protein-coupled receptors modified according to the above scheme were produced. Transmembrane signaling by these mutant receptors was greater than that by the unmodified receptor.

IT **264864-02-0 264864-16-6 264864-20-2**
264864-28-0
RL: BAC (Biological activity or effector, except adverse); PRP (Properties); BIOL (Biological study)
(amino acid sequence; constitutively active human G protein-coupled receptors and their use in screening for receptor modulators)

IT **187953-77-1 188551-57-7 205070-67-3**
RL: PRP (Properties)
(unclaimed protein sequence; constitutively active human G protein-coupled receptors and their use in screening for receptor modulators)

REFERENCE COUNT: 5
REFERENCE(S):
(1) Herrick Davis Katharine; WO 9838217 A 1998 HCAPLUS
(2) Kjelsberg, M; JOURNAL OF BIOLOGICAL CHEMISTRY V267(3), P1430 HCAPLUS
(3) New England Medical Center Inc; WO 9721731 A 1997 HCAPLUS
(4) Pauwels, P; MOLECULAR NEUROBIOLOGY 1998, V17(1/03), P109
(5) Scheer, A; JOURNAL OF RECEPTOR AND SIGNAL TRANSDUCTION RESEARCH 1997, V17(1/03), P57

L86 ANSWER 18 OF 44 HCAPLUS COPYRIGHT 2001 ACS
ACCESSION NUMBER: 2000:15365 HCAPLUS
DOCUMENT NUMBER: 132:74550
TITLE: Protein and cDNA sequences encoding human and mouse G protein-coupled receptors (14273 receptors), and uses thereof in drug screening assays and diagnostic and therapeutic applications
INVENTOR(S): Glucksmann, Maria Alexandra; Tsai, Fong-Ying
PATENT ASSIGNEE(S): Millennium Pharmaceuticals, Inc., USA
SOURCE: PCT Int. Appl., 89 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000000611	A2	20000106	WO 1999-US14842	19990630
WO 2000000611	A3	20000323		
W: AE, AL, AM, AT, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, CZ, DE, DE, DK, DK, EE, EE, ES, FI, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
AU 9947285	A1	20000117	AU 1999-47285	19990630
EP 1092024	A2	20010418	EP 1999-930838	19990630
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				

PRIORITY APPLN. INFO.:

US 1998-107761	A	19980630
US 1998-223538	A	19981230
US 1999-261599	A	19990226
WO 1999-US14842	W	19990630

AB The present invention provides protein and cDNA sequences encoding human and mouse G protein-coupled receptor 14273. This EST was used to design primers and used to identify a cDNA from a cDNA library. The 14273 receptor of the invention has homol. with galanin receptors, chemokine receptors and somatostatin. The invention further relates to methods using receptor polypeptides and polynucleotides for diagnosis and treatment in receptor-mediated disorders. The invention further relates to drug-screening methods using the receptor polypeptides and polynucleotides to identify agonists and antagonists for diagnosis and treatment. The invention further encompasses agonists and antagonists based on the receptor polypeptides and polynucleotides. The invention further relates to procedures for producing the receptor polypeptides and polynucleotides by recombinant methods.

IT **253658-81-0DP**, G protein-coupled receptor 14273 (human), subfragments are claimed
RL: BOC (Biological occurrence); BPN (Biosynthetic preparation); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); OCCU (Occurrence); PREP (Preparation); USES (Uses)
(amino acid sequence; protein and cDNA sequences encoding human and mouse G protein-coupled receptors (14273 receptors), and uses thereof in drug screening assays and diagnostic and therapeutic applications)

L86 ANSWER 19 OF 44 HCAPLUS COPYRIGHT 2001 ACS

ACCESSION NUMBER:	2000:100083 HCAPLUS
DOCUMENT NUMBER:	132:232317
TITLE:	Stimulation of the gonadotropic axis by the neuropeptide Y receptor Y1 antagonist/Y4 agonist 1229U91 in the male rat
AUTHOR(S):	Raposinho, Paula D.; Broqua, Pierre; Hayward, Amanda; Akinsanya, Karen; Galyean, Robert; Schteingart, Claudio; Junien, Jean-Louis; Aubert, Michel L.
CORPORATE SOURCE:	Division of Biology of Growth and Reproduction, Department of Pediatrics, University of Geneva School of Medicine, Geneva, Switz.
SOURCE:	Neuroendocrinology (2000), 71(1), 2-7 CODEN: NUNDAJ; ISSN: 0028-3835
PUBLISHER:	S. Karger AG
DOCUMENT TYPE:	Journal
LANGUAGE:	English

Searched by Barb O'Bryen, STIC 308-4291

AB Neuropeptide Y (NPY) is a highly potent orexigenic substance that is also known to modulate gonadotropin secretion. Five receptor subtypes for NPY have been identified, and a potent antagonist for the receptor subtype 1 (Y1), 1229U91, also known as GW1229 or GR231118, has been described. Subsequently, 1229U91 was also shown to represent a highly potent agonist for the Y4 receptor subtype. Very unexpectedly, intracerebroventricular administration of 1229U91 elicited an intense, dose-dependent surge of both LH and FSH in intact male rats that lasted for 6 h. Such stimulation was absent when a potent gonadotropin-releasing hormone antagonist was administered systemically, suggesting that 1229U91 acts centrally to stimulate gonadotropin-releasing hormone release. 1229U91 administration had no effect on growth hormone, TSH, and corticosterone secretions. In addn. to 1229U91, four other parent dimer mols. described earlier produced a marked and sustained stimulation of LH when injected intracerebroventricularly that was proportional to their binding affinity for the Y4 receptor. Central administration of the specific Y1 antagonist BIBO3304 (20 .mu.g) had no effect on LH secretion, making it unlikely for 1229U91 to stimulate LH secretion by an antagonistic action on the Y1 receptor subtype, thus suggesting a Y4 receptor mediation. In conclusion, the 1229U91 mol. displays an interesting conformational epitope that is able to generate large LH surges, possibly by activating Y4 or Y4-like receptor subtypes or by acting on a NPY receptor unrelated target.

IT **158859-96-2 158859-98-4**, 1229U91 **158860-00-5 158860-11-8 261757-37-3 261757-38-4**
RL: BAC (Biological activity or effector, except adverse); BIOL (Biological study)
(stimulation of gonadotropic axis by neuropeptide Y receptor Y1 antagonist/Y4 agonist 1229U91 in male rat)

REFERENCE COUNT: 29
REFERENCE(S):
(1) Bitran, M; Eur J Pharmacol 1997, V319, P43 HCAPLUS
(2) Blomqvist, A; Trends Neurosci 1997, V20, P294 HCAPLUS
(4) Catzeflis, C; Endocrinology 1993, V132, P224 HCAPLUS
(5) Cheng, Y; Biochem Pharmacol 1973, V22, P3099 HCAPLUS
(7) Daniels, A; WO 94/00486 1994 HCAPLUS
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L86 ANSWER 20 OF 44 HCAPLUS COPYRIGHT 2001 ACS
ACCESSION NUMBER: 1999:795672 HCAPLUS
DOCUMENT NUMBER: 132:19671
TITLE: Cloning and cDNA sequence of a human G-protein coupled receptor (hCEPR) and its diagnostic and therapeutic uses
INVENTOR(S): Elshourbagy, Nabil A.; Li, Xiaotong
PATENT ASSIGNEE(S): Smithkline Beecham Corporation, USA
SOURCE: PCT Int. Appl., 39 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9964021	A1	19991216	WO 1999-US12125	19990601
W: JP				
RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
EP 1083909	A1	20010321	EP 1999-928361	19990601

R: BE, CH, DE, DK, FR, GB, IT, LI, NL
PRIORITY APPLN. INFO.: US 1998-95734 A 19980611
WO 1999-US12125 W 19990601

AB The hCEPR polypeptides and polynucleotides and methods for producing such polypeptides by recombinant techniques are disclosed. HCEPR cDNA shows homol. with G-protein coupled receptor CEPR cDNA sequence, and encodes a protein of 375 amino acids. Also disclosed are methods for utilizing hCEPR polypeptides and polynucleotides in therapy, and diagnostic assays for such.

IT **190281-32-4P**
RL: BOC (Biological occurrence); BPN (Biosynthetic preparation); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); OCCU (Occurrence); PREP (Preparation); USES (Uses)
(amino acid sequence; cloning and cDNA sequence of human G-protein coupled receptor (hCEPR) and its diagnostic and therapeutic uses)

REFERENCE COUNT: 4
REFERENCE(S):
(1) Asahi Kasei Kogyo Kabushiki Kaisha; WO 9715672 A1 1997 HCAPLUS
(2) Carmeci; Genomics 1997, V45(3), P607 HCAPLUS
(3) Freifelder, D; Physical Biochemistry Second Edition 1982, P19
(4) Owman; Biochemical and Biophysicla Research Communications 1996, V228(2), P285 HCAPLUS

L86 ANSWER 21 OF 44 HCAPLUS COPYRIGHT 2001 ACS
ACCESSION NUMBER: 1999:736736 HCAPLUS
DOCUMENT NUMBER: 131:346503
TITLE: Peptides derived from frameshift-mutated genes which elicit T cell immunity and their use as cancer vaccines
INVENTOR(S): Gaudernack, Gustav; Eriksen, Jon Amund; Moller, Mona; Gjertsen, Marianne Klemp; Saeterdal, Ingvil
PATENT ASSIGNEE(S): Norsk Hydro Asa, Norway
SOURCE: PCT Int. Appl., 167 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9958552	A2	19991118	WO 1999-NO143	19990503
WO 9958552	A3	20000302		
W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
NO 9802097	A	19991109	NO 1998-2097	19980508
AU 9954516	A1	19991129	AU 1999-54516	19990503
EP 1078000	A2	20010228	EP 1999-940722	19990503

PRIORITY APPLN. INFO.: NO 1998-2097 A 19980508
WO 1999-NO143 W 19990503

AB Peptides from cancer-related protein products of frameshift mutated genes are provided which elicit T cellular immunity for use in cancer vaccines and compns. for anticancer treatment. New protein sequences arising from

frameshift mutations in genes in cancer cells give rise to tumor rejection antigens that are recognized by T cells in the context of HLA mols. Further, a group of peptides corresponding to fragments of mutant proteins arising from frameshift mutations in genes in cancer cells can be used to generate T cells and to increase T cell activation against cancer cells harboring a gene with such mutations. These peptides are at least 8 amino acids long and correspond, either in their full length or after processing by antigen-presenting cells, to the mutant gene products or fragments thereof produced by cancer cells in a human patient afflicted with cancer. The peptides of the present invention is explicitly exemplified through 2 different embodiments, wherein cancer develops based on frameshift mutations in specific genes, namely the BAX gene and transforming growth factor .beta. receptor type II gene. Thus, 459 peptide sequences are provided. The present invention also provides a method for identifying new peptides which correspond to fragments of proteins arising from frameshift mutations in genes.

IT **249755-69-9P**
RL: BAC (Biological activity or effector, except adverse); BPN (Biosynthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(BRCA1-assocd. RING domain protein gene BARD1-derived; peptides derived from frameshift-mutated genes which elicit T cell immunity and their use as cancer vaccines)

IT **249755-10-0P 249755-12-2P 249755-13-3P**
RL: BAC (Biological activity or effector, except adverse); BPN (Biosynthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(malignant melanoma metastasis-suppressor gene KiSS-1-derived; peptides derived from frameshift-mutated genes which elicit T cell immunity and their use as cancer vaccines)

IT **249755-01-9P**
RL: BAC (Biological activity or effector, except adverse); BPN (Biosynthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(retinoblastoma-related protein p107 gene-derived; peptides derived from frameshift-mutated genes which elicit T cell immunity and their use as cancer vaccines)

IT **250328-40-6**
RL: PRP (Properties)
(unclaimed sequence; peptides derived from frameshift-mutated genes which elicit T cell immunity and their use as cancer vaccines)

L86 ANSWER 22 OF 44 HCAPLUS COPYRIGHT 2001 ACS
ACCESSION NUMBER: 1999:77663 HCAPLUS
DOCUMENT NUMBER: 130:148678
TITLE: Compositions and methods for identifying modulators of transducisomes, a new class of therapeutic targets
INVENTOR(S): Zuker, Charles S.; Mendlein, John D.; Sun, Humei; Tsunoda, Susan; Sierralta, Jimena
PATENT ASSIGNEE(S): The Regents of the University of California, USA; Aurora Biosciences Corporation
SOURCE: PCT Int. Appl., 96 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9903974	A1	19990128	WO 1998-US14667	19980715

W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, HR, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

AU 9884059 A1 19990210 AU 1998-84059 19980715
PRIORITY APPLN. INFO.: US 1997-52588 19970715
WO 1998-US14667 19980715

AB The invention provides cells and methods for identifying modulators of signal transduction, based on transducisome proteins that coordinate and assemble many types of signal transduction proteins. A transducisome is a PDZ domain contg. protein that binds at least one signal transduction protein or a PDZ domain contg. protein with at least one signal transduction protein bound. Examples of transducisome proteins include INAD, GRIP and other recently identified multi-PDZ domain proteins. Examples of signal transduction proteins include GPCRs, tyrosine kinase receptors, tyrosine phosphatase receptors, ion channels, phospholipases, adenylate cyclases, kinases and G-proteins. Also provided are methods for identifying modulators of signal transduction, proteins (and polynucleotides encoding the same) corresponding to transducisomes, modified transducisomes or defective transducisomes to use in assays of signal transduction, and a screening assay system for detecting protein-protein interactions.

IT **220276-32-4P**
RL: BOC (Biological occurrence); BPN (Biosynthetic preparation); BPR (Biological process); PRP (Properties); BIOL (Biological study); OCCU (Occurrence); PREP (Preparation); PROC (Process)
(amino acid sequence; compns. and methods for identifying modulators of transducisomes, a new class of therapeutic targets)

REFERENCE COUNT: 5
REFERENCE(S):
(1) Chevesich; Neuron 1997, V18, P95 HCAPLUS
(2) Huber; The EMBO Journal 1996, V15(24), P7036 HCAPLUS
(3) Saras; Trends in Biochemical Sciences 1996, V21(12), P455 HCAPLUS
(4) Shieh; Proceedings of the National Academy of Science USA 1997, V94, P12682 HCAPLUS
(5) Tsunoda; Nature 1997, V388, P243 HCAPLUS

L86 ANSWER 23 OF 44 HCAPLUS COPYRIGHT 2001 ACS
ACCESSION NUMBER: 1999:450887 HCAPLUS
DOCUMENT NUMBER: 131:97620
TITLE: Peptides useful as somatostatin antagonists
INVENTOR(S): Baumbach, William Robert; Houghten, Richard A.
PATENT ASSIGNEE(S): American Cyanamid Company, USA
SOURCE: U.S., 15 pp.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 5925618	A	19990720	US 1998-33395	19980303

PRIORITY APPLN. INFO.: US 1997-35181 19970606
OTHER SOURCE(S): MARPAT 131:97620
AB The present invention provides peptides having pure somatostatin

antagonist activity. Also provided are methods for increasing the release of growth hormone, insulin, glucagon and gastric enzymes in mammals and a method for the enhancement of immune function and growth in mammals. Rats given peptide Ac-D-His-D-Phe-D-Ile-D-Arg-D-Trp-D-Phe-NH2 showed increased serum growth hormone levels.

IT **231622-87-0**
RL: BAC (Biological activity or effector, except adverse); BPR (Biological process); BIOL (Biological study); PROC (Process)
(somatostatin receptor antagonist activity of; peptides useful as somatostatin antagonists)

REFERENCE COUNT: 14
REFERENCE(S):
(1) Atherton; Journal of the Chemical Society Perkin Trans I 1985, P2057 HCAPLUS
(2) Bond, R; Nature 1995, V374, P272 HCAPLUS
(3) Bowers; US 4839344 1989 HCAPLUS
(4) Bowers; US 4880778 1989 HCAPLUS
(5) Dooley, C; Science 1994, V266, P2019 HCAPLUS
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L86 ANSWER 24 OF 44 HCAPLUS COPYRIGHT 2001 ACS
ACCESSION NUMBER: 1999:168147 HCAPLUS
DOCUMENT NUMBER: 130:296981
TITLE: Fluorescent Pseudo-Peptide Linear Vasopressin Antagonists: Design, Synthesis, and Applications
AUTHOR(S): Durroux, Thierry; Peter, Marion; Turcatti, Gerardo; Chollet, Andre; Balestre, Marie-Noeelle; Barberis, Claude; Seyer, Rene
CORPORATE SOURCE: INSERM U 469 and CNRS UPR 9023, CCIPE, Montpellier, 34094, Fr.
SOURCE: J. Med. Chem. (1999), 42(7), 1312-1319
CODEN: JMCMAR; ISSN: 0022-2623
PUBLISHER: American Chemical Society
DOCUMENT TYPE: Journal
LANGUAGE: English

AB Fluoresceinyl and rhodamyl groups have been coupled by an amide link to side-chain amino groups at positions 1, 6, and 8 of pseudopeptide linear vasopressin antagonists through different positions on the fluorophore, to give tetraethylrhodamyl-D-Tyr(Me)-Phe-Gln-Asn-Arg-Pro-Arg-Tyr-NH2, 4-HOC6H4(CH2)2CO-D-Tyr(Me)-Phe-Gln-Asn-Lys(5-carboxyfluoresceinyl)-Pro-Arg-NH2, 4-HOC6H4(CH2)2CO-D-Tyr(Me)-Phe-Gln-Asn-Lys(5- or 6-carboxytetramethylrhodamyl)-Pro-Arg-NH2, 4-HOC6H4(CH2)2CO-D-Tyr(Me)-Phe-Gln-Asn-Arg-Pro-Lys(5- or 6-carboxyfluoresceinyl)-NH2, 4-HOC6H4(CH2)2CO-D-Tyr(Me)-Phe-Gln-Asn-Arg-Pro-Lys(5-carboxytetramethylrhodamyl)-NH2 (I), and its 6-carboxytetramethylrhodamyl analog. The closer to the C-terminus the fluorophore, the higher the affinities of the fluorescent derivs. for the human vasopressin V1a receptor transfected in CHO cells. Compd. I has a Ki of 70 pM, as detd. by competition expts. with [125I]-4-HOC6H4CH2CO-D-Tyr(Me)-Phe-Gln-Asn-Arg-Pro-Arg-NH2. It showed a good selectivity for human V1a receptor vs. human oxytocin (Ki = 1.2 nM), human vasopressin V1b (Ki .apprxeq. 27 nM), and human vasopressin V2 (Ki > 5000 nM) receptor subtypes. All fluorescent analogs were antagonists as shown by the inhibition of vasopressin induced inositol phosphate accumulation. These fluorescent ligands are efficient for labeling cells expressing the human V1a receptor subtype, as shown by flow cytofluorometric expts. or fluorescence microscopy. They are also appropriate tools for structural anal. of the vasopressin receptors by fluorescence.

IT **223135-32-8P**
RL: BAC (Biological activity or effector, except adverse); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)
(design, synthesis, and antagonist activities of linear vasopressin

fluorescent pseudopeptides)
IT **223135-24-8P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)
(design, synthesis, and antagonist activities of linear vasopressin fluorescent pseudopeptides)
REFERENCE COUNT: 33
REFERENCE(S): (1) Barberis, C; Neuroendocrinology 1995, V62, P135 HCAPLUS
(2) Carnazzi, E; J Med Chem 1994, V37, P1841 HCAPLUS
(3) Coste, J; Tetrahedron Lett 1990, V31, P205 HCAPLUS
(5) Faure, M; J Histochem Cytochem 1994, V42, P755 HCAPLUS
(6) Frerot, E; Tetrahedron 1991, V47, P259 HCAPLUS
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L86 ANSWER 25 OF 44 HCAPLUS COPYRIGHT 2001 ACS
ACCESSION NUMBER: 1999:353265 HCAPLUS
DOCUMENT NUMBER: 131:166695
TITLE: Structural essentials for agonist-antagonist actions of thrombin receptor tethered-ligand
AUTHOR(S): Nose, Takeru; Fujita, Tsugumi; Morita, Yuki; Costa, Tommaso; Shimohigashi, Yasuyuki
CORPORATE SOURCE: Department of Chemistry, Faculty of Science, Kyushu University, Fukuoka, 812-8581, Japan
SOURCE: Pept. Sci. (1999), Volume Date 1998, 35th, 217-220
CODEN: PSCIFQ; ISSN: 1344-7661
PUBLISHER: Protein Research Foundation
DOCUMENT TYPE: Journal
LANGUAGE: English
AB In order to clarify structural essentials for agonist and antagonist activities against thrombin receptor, we have designed and synthesized a series of analogs of thrombin receptor tethered-ligand peptide (SFLLRNP). It was found that potent antagonists require a combination of the N-terminal trans-cinnamoyl, para-fluoro-Phe-2, and Arg-3. In particular, the placement of N-terminal benzene ring instead of the N-terminal amino group appeared to be an essential requisite for antagonist.
IT **238756-19-9**
RL: BPR (Biological process); PRP (Properties); BIOL (Biological study); PROC (Process)
(structural essentials for agonist-antagonist actions of thrombin receptor tethered-ligand)
REFERENCE COUNT: 6
REFERENCE(S): (1) Bernatowicz, M; J Med Chem 1996, V39, P4879 HCAPLUS
(3) Nose, T; Biochem Biophys Res Commun 1993, V193, P694 HCAPLUS
(4) Nose, T; Bull Chem Soc Jpn 1995, V68, P2695 HCAPLUS
(5) Nose, T; Bull Chem Soc Jpn 1998, V71, P1661 HCAPLUS
(6) Sakaguchi, K; Bull Chem Soc Jpn 1994, V67, P1659 HCAPLUS
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L86 ANSWER 26 OF 44 HCAPLUS COPYRIGHT 2001 ACS
ACCESSION NUMBER: 1999:578704 HCAPLUS
DOCUMENT NUMBER: 132:102593
TITLE: Agonist-antagonist structure-activity relationships of thrombin receptor tethered ligand peptide
AUTHOR(S): Fujita, T.; Nose, T.; Nakajima, M.; Inoue, Y.; Nakamura, N.; Inoue, T.; Costa, T.; Shimohigashi, Y.

Searched by Barb O'Bryen, STIC 308-4291

CORPORATE SOURCE: Laboratory of Biochemistry, Department of Chemistry, Faculty of Science, Kyushu University, Fukuoka, 812-8581, Japan
SOURCE: Pept. Sci.: Present Future, Proc. Int. Pept. Symp., 1st (1999), Meeting Date 1997, 202-204. Editor(s): Shimonishi, Yasutsugu. Kluwer: Dordrecht, Neth. CODEN: 68BYA5
DOCUMENT TYPE: Conference
LANGUAGE: English
AB In order to obtain an effective antagonist of thrombin receptor, we have designed several SFLLRNP analogs that could be expected to establish new interaction with the receptor.
IT **238756-19-9 255837-48-0 255837-49-1 255837-50-4**
RL: BAC (Biological activity or effector, except adverse); BIOL (Biological study)
(agonist-antagonist structure-activity relationships of thrombin receptor tethered ligand peptide)
REFERENCE COUNT: 5
REFERENCE(S):
(1) Bernatowicz, M; J Med Chem 1996, V39, P4879 HCAPLUS
(2) Nose, T; Biochem Biophys Res Commun 1993, V193, P694 HCAPLUS
(3) Nose, T; Bull Chem Soc 1995, V68, P2695 HCAPLUS
(4) Shimohigashi, Y; Biochem Biophys Res Commun 1994, V203, P366 HCAPLUS
(5) Vu, T; Cell 1991, V64, P1057 HCAPLUS

L86 ANSWER 27 OF 44 HCAPLUS COPYRIGHT 2001 ACS
ACCESSION NUMBER: 1997:9227 HCAPLUS
DOCUMENT NUMBER: 126:31668
TITLE: Preparation of cyclic pentapeptide LH-RH receptor antagonists
INVENTOR(S): Kitada, Chieko; Furuya, Shuichi; Kato, Koichi
PATENT ASSIGNEE(S): Takeda Chemical Industries, Ltd., Japan; Kitada, Chieko; Furuya, Shuichi; Kato, Koichi
SOURCE: PCT Int. Appl., 199 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9634012	A1	19961031	WO 1996-JP1140	19960425
W: AL, AM, AU, AZ, BB, BG, BR, BY, CA, CN, CZ, EE, GE, HU, IS, KG, KR, KZ, LK, LR, LT, LV, MD, MG, MK, MN, MX, NO, NZ, PL, RO, RU, SG, SI, SK, TJ, TM, TR, TT, UA, US, UZ, VN, AM, AZ, BY, KG, KZ, MD, RU				
RW: KE, LS, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
CA 2215737	AA	19961031	CA 1996-2215737	19960425
AU 9655143	A1	19961118	AU 1996-55143	19960425
EP 822939	A1	19980211	EP 1996-912247	19960425
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, PT, IE, FI				
CN 1183104	A	19980527	CN 1996-193586	19960425
JP 09025294	A2	19970128	JP 1996-107405	19960426
US 6136781	A	20001024	US 1996-656244	19960606

PRIORITY APPLN. INFO.: JP 1995-106775 A 19950428

JP 1995-110933 A 19950509
WO 1996-JP1140 W 19960425

OTHER SOURCE(S): MARPAT 126:31668

AB LH-RH receptor antagonists contg. cyclic pentapeptides or salts thereof and novel cyclic pentapeptide or salts thereof are provided. These LH-RH receptor antagonists are effective as medicines for preventing and curing sex hormone-dependent cancers (e.g., prostatic cancer, uterine cancer, mammary cancer, pituitary tumor, etc.), prostatomegaly, endometriosis, hysteromyoma, puberty precox, amenorrheal syndromes, multilocular ovarian syndromes, comedo, etc, and are also effective as pregnancy controlling agents (e.g., contraceptives, etc.) and menstrual cycle controlling agents. Moreover, these are also useful in the livestock industry for the control fo the estrus of animals and also for the improvement in the quality of meat and for the control of the growth of animals, as well as in the marine products industry as spawning promoters for fishes. Thus, cyclo(Phg-D-Arg(Tos)-Phe-D-Ala-Trp) (Phg = L-phenylglycine, Tos = tosyl), prepd. by std. 9-fluorenylmethoxycarbonyl (Fmoc) chem. on a Wang resin, exhibited IC50 = 0.07 .mu.M in a LH-RH receptor assay. Ref. compd. cyclo(Tyr-D-Trp-Leu-Arg-Trp-Pro) showed IC50 = 10 .mu.M in the same assay.

IT **184832-46-0P 184832-47-1P 184832-48-2P**
184832-50-6P 184832-51-7P 184832-52-8P
184832-74-4P 184832-77-7P 184833-00-9P
184833-25-8P 184833-29-2P
RL: BAC (Biological activity or effector, except adverse); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(prepn. of cyclic pentapeptide LH-RH receptor antagonists)

L86 ANSWER 28 OF 44 HCAPLUS COPYRIGHT 2001 ACS
ACCESSION NUMBER: 1996:191553 HCAPLUS
DOCUMENT NUMBER: 124:251819
TITLE: Parathyroid hormone receptor cDNAs and their use in the manufacture of the receptor and receptor fragments
INVENTOR(S): Segre, Gino V.; Kronenberg, Henry M.; Abou-Samra, Abdul-Badi; Juppner, Harald; Potts, John T., Jr.; Schipani, Ernestina
PATENT ASSIGNEE(S): The General Hospital Corporation, USA
SOURCE: U.S., 64 pp., Cont.-in-part of U.S. Ser. No. 681,702, abandoned.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 5494806	A	19960227	US 1992-864475	19920406
CA 2107569	AA	19921006	CA 1992-2107569	19920406
WO 9217602	A1	19921015	WO 1992-US2821	19920406
W: CA, JP				
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LU, MC, NL, SE				
US 5840853	A	19981124	US 1995-471494	19950606
US 5886148	A	19990323	US 1995-468249	19950606

PRIORITY APPLN. INFO.: US 1991-681702 19910405
US 1992-864465 19920406
US 1992-864475 19920406

AB CDNAs for mammalian parathyroid hormone receptors are cloned for use in the manuf. of the receptor or antigenic fragments for the prepn. of antibodies or for use in methods for screening candidate agonists or antagonists and in diagnostics and therapeutics. CDNAs for receptors from

opossum kidney and rat bone (osteosarcoma) were cloned by expression in COS cells using pcDNAI as the expression vector. The rat cDNA was then used to probe a human kidney cDNA library.

IT **146590-23-0**, Receptor, parathormone (Didelphis virginiana clone OK-H reduced) **146590-26-3**, Receptor, parathormone (Didelphis virginiana clone OK-O reduced) **146590-29-6**, Receptor, parathormone (rat clone R15B reduced) **175070-66-3**, Receptor, parathormone (human)
RL: BSU (Biological study, unclassified); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(amino acid sequence; parathyroid hormone receptor cDNAs and their use in manuf. of receptor and receptor fragments)

L86 ANSWER 29 OF 44 HCAPLUS COPYRIGHT 2001 ACS
ACCESSION NUMBER: 1996:293258 HCAPLUS
DOCUMENT NUMBER: 124:333321
TITLE: Isosteric substitution of Asn5 in **antagonists** of oxytocin and vasopressin leads to highly selective and potent oxytocin and V1a receptor **antagonists**: new approaches for the design of potential tocolytics for preterm labor
AUTHOR(S): Chan, W. Y.; Wo, Nga Ching; Cheng, Ling Ling; Manning, Maurice
CORPORATE SOURCE: Dep. Pharmacology, Cornell Univ. Med. Coll., New York, NY, USA
SOURCE: J. Pharmacol. Exp. Ther. (1996), 277(2), 999-1003
CODEN: JPETAB; ISSN: 0022-3565
DOCUMENT TYPE: Journal
LANGUAGE: English

AB Substitution of Asn5 in oxytocin (OT) or vasopressin (VP) invariably leads to a dramatic loss of the biol. activities of the peptides. Because of this observation, few structure-activity-relation studies of OT and VP peptides have involved modifications in the 5 position. It is now recognized that peptide agonists and antagonists may use different structural and conformational features in their interactions with the receptors. Our prior studies showed that OT and VP antagonists, unlike the agonists, tolerate amino acid substitutions in the 5 position. This opens new approaches for the design of antagonists. We describe the effects of isosteric replacement of Asn5 by diaminopropionic acid (Dap) or diaminobutyric acid (Dab) in three OT and VP antagonists: (1) the V1a (vasopressor receptor) antagonist d(CH2)5[Tyr(Me)2]AVP; (2) the OT (uterine OT receptor) antagonist d(CH2)5[Tyr(Me)2, Thr4,Tyr-NH29]OVT and (3) three selective antagonists, desGly-NH2,d(CH2)5[D-Tyr2,Thr4]OVT, desGly-NH2,d(CH2)5[D-Phe2,Thr4]OVT and desGly-NH2,d(CH2)5-[D-Trp2,Thr4]OVT. The Dap5 and Dab5 substitutions were tolerated remarkably well, with the less isosteric Dap5 substitution leading to a greater retention of anti-OT potency than the Dab5 substitution. Furthermore, the Dap5 and Dab5 OT and VP antagonist analogs were surprisingly shown to be much more selective than their resp. parent compds. The Dab5 analog of (1) was devoid of anti-OT activity. The three Dap5 analogs of (3) were devoid of anti-V1a activities. These appear to be the first single-receptor-type-selective OT and VP antagonists discovered to date. These findings could provide new leads for the development of single-receptor-type-selective receptor probes for the localization and characterization of OT and VP receptors and potential selective tocolytics for the treatment of premature labor.

IT **176714-13-9P 176714-14-0P**
RL: BAC (Biological activity or effector, except adverse); PRP (Properties); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)
(structure-activity of oxytocin and vasopressin antagonists in relation

to receptor selectivity and tocolytics for preterm labor)

L86 ANSWER 30 OF 44 HCAPLUS COPYRIGHT 2001 ACS
ACCESSION NUMBER: 1993:140696 HCAPLUS
DOCUMENT NUMBER: 118:140696
TITLE: PTH receptor and DNA encoding same
INVENTOR(S): Segre, Gino V.; Kronenberg, Henry M.; Abou-Samra, Abdul Badi; Juppner, Harald; Potts, John T., Jr.; Schipani, Ernestina
PATENT ASSIGNEE(S): General Hospital Corp., USA
SOURCE: PCT Int. Appl., 101 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9217602	A1	19921015	WO 1992-US2821	19920406
W: CA, JP				
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LU, MC, NL, SE				
EP 579758	A1	19940126	EP 1992-910874	19920406
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, MC, NL, SE				
JP 06506598	T2	19940728	JP 1992-510035	19920406
US 5494806	A	19960227	US 1992-864475	19920406
US 5886148	A	19990323	US 1995-468249	19950606

PRIORITY APPLN. INFO.: US 1991-681702 19910405
US 1992-864475 19920406
US 1992-864465 19920406
WO 1992-US2821 19920406

AB Disclosed are DNA encoding a PTH receptor, prodn. and isolation of recombinant and synthetic PTH receptor polypeptides and fragments, antibodies to the PTH receptors and receptor fragments, methods for screening candidate compds. for agonist or antagonist effects, and diagnostic and therapeutic methods using these compds. Isolation of cDNA clones encoding the rat and opossum PTH/PTHrP receptors (PTHrP is PTH-related protein) and of cDNA and genomic DNA clones encoding the human PTH/PTHrP receptor is described (nucleotide and amino acid sequences included). Functional characterization of the rat and opossum receptors was performed in transiently transfected COS cells with a radioreceptor assay and by bioassays that measured ligand-stimulated cAMP accumulation, increase in **intracellular** free Ca, and stimulation of inositol phosphate metab.; activity of the human receptor was detd. using transfected COS-7 cells.

IT **146590-23-0 146590-26-3 146590-29-6**
RL: PRP (Properties)
(amino acid sequence of, complete, and cloning of DNA for)

L86 ANSWER 31 OF 44 HCAPLUS COPYRIGHT 2001 ACS
ACCESSION NUMBER: 1991:623719 HCAPLUS
DOCUMENT NUMBER: 115:223719
TITLE: Identification and enzymic deglycosylation of the myometrial oxytocin receptor using a radioiodinated photoreactive **antagonist**
AUTHOR(S): Kojro, Elzbieta; Hackenberg, Mario; Zsïgo, Josef; Fahrenholz, Falk
CORPORATE SOURCE: Max-Planck-Inst. Biophys., Frankfurt/Main, D-6000/70, Fed. Rep. Ger.
SOURCE: J. Biol. Chem. (1991), 266(32), 21416-21
CODEN: JBCHA3; ISSN: 0021-9258

Searched by Barb O'Bryen, STIC 308-4291

DOCUMENT TYPE: Journal
LANGUAGE: English

AB To identify and characterize oxytocin receptors, a 125I-labeled photoreactive oxytocin antagonist was synthesized. The specific oxytocin antagonist [1-(.beta.-mercapto-.beta.,.beta.-cyclopentamethylenepropionic acid), 2-O-methyltyrosine,4-threonine,8-ornithine,9-tyrosylamide]oxytocin ([Mca1,Tyr(O-Me)2,Thr4,Orn8,Tyr9-NH2]oxytocin) bound to the guinea pig uterine oxytocin receptor with high affinity (apparent Kd = 0.74 nM). The introduction of a 4-azidophenylamidino group at Orn8 resulted in the photoreactive ligand [Mca1,Tyr(O-Me)2,Thr4,Orn(4-azidophenylamidino)8,Tyr9-NH2]oxytocin, which retained the high binding affinity (Kd = 0.69 nM) of the parent compd. The photoreactive antagonist monoiodinated at Tyr9 had approx. double (Kd = 0.39 nM) the affinity of the photoreactive antagonist and several times that of oxytocin (Kd = 2.6 nM) for the guinea pig uterine oxytocin receptor. In photoaffinity labeling expts. using myometrial membranes obtained from guinea pigs during late pregnancy, the 125I-labeled photoreactive antagonist specifically labeled a protein with an apparent mol. mass of between 68 and 80 kDa; the labeling of this protein was completely suppressed by a 100-fold molar excess of oxytocin and oxytocin-specific agonists, but not by vasopressin analogs specific for V1 or V2 receptors or by other peptide hormones. The ability of oxytocin to suppress labeling was decreased in the presence of guanosine 5'-O-(thiotriphosphate) or in the absence of Mn2+. Digestion of the photolabeled oxytocin receptor with endoglycosidase F gave rise to a protein with an apparent mol. mass of 38 kDa. The endoglycosidase F effect and the lack of endoglycosidase H action show that the myometrial oxytocin receptor is highly glycosylated with asparagine-linked complex oligosaccharide chains. The radioiodinated photoreactive oxytocin antagonist could be a helpful tool in the isolation and further characterization of the oxytocin receptor.

IT **137053-27-1 137053-28-2**
RL: BIOL (Biological study)
(oxytocin receptor affinity for)

L86 ANSWER 32 OF 44 USPATFULL
ACCESSION NUMBER: 2001:63462 USPATFULL
TITLE: Compositions and methods for the treatment and diagnosis of cardiovascular disease using rchd534 as a target
INVENTOR(S): Falb, Dean A., Wellesley, MA, United States
Gimbrone, Jr., Michael A., Jamaica Plain, MA, United States
PATENT ASSIGNEE(S): Millennium Pharmaceuticals, Inc., Cambridge, MA, United States (U.S. corporation)
Brigham and Women's Hospital, Boston, MA, United States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 6225084	B1	20010501
APPLICATION INFO.:	US 1997-925767		19970909 (8)

RELATED APPLN. INFO.: Division of Ser. No. US 1995-485573, filed on 7 Jun 1995, now patented, Pat. No. US 5968710
Continuation-in-part of Ser. No. US 1995-386844, filed on 10 Feb 1995
DOCUMENT TYPE: Utility
PRIMARY EXAMINER: LeGuyader, John L.
ASSISTANT EXAMINER: Nguyen, Dave Trong
LEGAL REPRESENTATIVE: Pennie & Edmonds LLP
NUMBER OF CLAIMS: 30
EXEMPLARY CLAIM: 1

NUMBER OF DRAWINGS: 53 Drawing Figure(s); 53 Drawing Page(s)
LINE COUNT: 4683
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The present invention relates to methods and compositions for the treatment and diagnosis of cardiovascular disease, including, but not limited to, atherosclerosis, ischemia/reperfusion, hypertension, restenosis, and arterial inflammation. Specifically, the present invention identifies and describes genes which are differentially expressed in cardiovascular disease states, relative to their expression in normal, or non-cardiovascular disease states, and/or in response to manipulations relevant to cardiovascular disease. Further, the present invention identifies and describes genes via the ability of their gene products to interact with gene products involved in cardiovascular disease. Still further, the present invention provides methods for the identification and therapeutic use of compounds as treatments of cardiovascular disease. Moreover, the present invention provides methods for the diagnostic monitoring of patients undergoing clinical evaluation for the treatment of cardiovascular disease, and for monitoring the efficacy of compounds in clinical trials. Additionally, the present invention describes methods for the diagnostic evaluation and prognosis of various cardiovascular diseases, and for the identification of subjects exhibiting a predisposition to such conditions.
IT **182016-73-5**, Protein (human gene RCHD523)
(amino acid sequence; compns. and methods based on differentially expressed genes for treatment and diagnosis of cardiovascular disease)

L86 ANSWER 33 OF 44 USPATFULL
ACCESSION NUMBER: 2000:128465 USPATFULL
TITLE: Compositions and methods for treatment and diagnosis of cardiovascular disease
INVENTOR(S): Falb, Dean A., Wellesley, MA, United States
Gimbrone, Jr., Michael A., Jamaica Plain, MA, United States
PATENT ASSIGNEE(S): Millennium Pharmaceuticals, Inc., Cambridge, MA, United States (U.S. corporation)
Brigham and Women's Hospital, Boston, MA, United States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 6124433		20000926
APPLICATION INFO.:	US 1997-944496		19971006 (8)

RELATED APPLN. INFO.: Division of Ser. No. US 1996-599654, filed on 9 Feb 1996, now patented, Pat. No. US 5882925 which is a continuation-in-part of Ser. No. US 1995-485573, filed on 7 Jun 1995 which is a continuation-in-part of Ser. No. US 1995-386844, filed on 10 Feb 1995
DOCUMENT TYPE: Utility
PRIMARY EXAMINER: Priebe, Scott D.
ASSISTANT EXAMINER: Nguyen, Dave Trong
LEGAL REPRESENTATIVE: Pennie & Edmonds LLP
NUMBER OF CLAIMS: 5
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 53 Drawing Figure(s); 53 Drawing Page(s)
LINE COUNT: 5924
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The present invention relates to methods and compositions for the treatment and diagnosis of cardiovascular disease, including, but not limited to, atherosclerosis, ischemia/reperfusion, hypertension, restenosis, and arterial inflammation. Specifically, the present invention identifies and describes genes which are differentially

expressed in cardiovascular disease states, relative to their expression in normal, or non-cardiovascular disease states, and/or in response to manipulations relevant to cardiovascular disease. Further, the present invention identifies and describes genes via the ability of their gene products to interact with gene products involved in cardiovascular disease. Still further, the present invention provides methods for the identification and therapeutic use of compounds as treatments of cardiovascular disease. Moreover, the present invention provides methods for the diagnostic monitoring of patients undergoing clinical evaluation for the treatment of cardiovascular disease, and for monitoring the efficacy of compounds in clinical trials. Additionally, the present invention describes methods for the diagnostic evaluation and prognosis of various cardiovascular diseases, and for the identification of subjects exhibiting a predisposition to such conditions.

IT **182016-73-5**, Protein (human gene RCHD523)
(amino acid sequence; compns. and methods based on differentially expressed genes for treatment and diagnosis of cardiovascular disease)

L86 ANSWER 34 OF 44 USPATFULL

ACCESSION NUMBER: 2000:50808 USPATFULL

TITLE: Compositions and methods for the treatment and diagnosis of cardiovascular disease using rchd534 as a target

INVENTOR(S): Falb, Dean A., Wellesley, MA, United States
Gimbrone, Jr., Michael A., Jamaica Plain, MA, United States

PATENT ASSIGNEE(S): Millennium Pharmaceuticals, Inc., Cambridge, MA, United States (U.S. corporation)
Brigham and Womens's Hospital, Boston, MA, United States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 6054558		20000425
APPLICATION INFO.:	US 1997-925743		19970909 (8)

RELATED APPLN. INFO.: Division of Ser. No. US 1995-485573, filed on 7 Jun 1995 which is a continuation-in-part of Ser. No. US 1995-386844, filed on 10 Feb 1995

DOCUMENT TYPE: Utility

PRIMARY EXAMINER: Priebe, Scott D.

ASSISTANT EXAMINER: Nguyen, Dave Trong

LEGAL REPRESENTATIVE: Pennie & Edmonds LLP

NUMBER OF CLAIMS: 3

EXEMPLARY CLAIM: 1

NUMBER OF DRAWINGS: 36 Drawing Figure(s); 53 Drawing Page(s)

LINE COUNT: 5141

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention relates to methods and compositions for the treatment and diagnosis of cardiovascular disease, including, but not limited to, atherosclerosis, ischemia/reperfusion, hypertension, restenosis, and arterial inflammation. Specifically, the present invention identifies and describes genes which are differentially expressed in cardiovascular disease states, relative to their expression in normal, or non-cardiovascular disease states, and/or in response to manipulations relevant to cardiovascular disease. Further, the present invention identifies and describes genes via the ability of their gene products to interact with gene products involved in cardiovascular disease. Still further, the present invention provides methods for the identification and therapeutic use of compounds as treatments of cardiovascular disease. Moreover, the present invention provides methods for the diagnostic monitoring of patients undergoing clinical evaluation

for the treatment of cardiovascular disease, and for monitoring the efficacy of compounds in clinical trials. Additionally, the present invention describes methods for the diagnostic evaluation and prognosis of various cardiovascular diseases, and for the identification of subjects exhibiting a predisposition to such conditions.

IT **182016-73-5**, Protein (human gene RCHD523)
(amino acid sequence; compns. and methods based on differentially expressed genes for treatment and diagnosis of cardiovascular disease)

L86 ANSWER 35 OF 44 USPATFULL
ACCESSION NUMBER: 2000:24478 USPATFULL
TITLE: Polynucleotides encoding G-protein parathyroid hormone receptor HLTDG74 polypeptides
INVENTOR(S): Soppet, Daniel R., Centreville, VA, United States
Li, Yi, Gaithersburg, MD, United States
Rosen, Craig A., Laytonsville, MD, United States
Ruben, Steven M., Olney, MD, United States
PATENT ASSIGNEE(S): Human Genome Sciences, Inc., Rockville, MD, United States (U.S. corporation)

	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 6030804		20000229	
APPLICATION INFO.:	US 1995-468011		19950606	(8)

DOCUMENT TYPE: Utility
PRIMARY EXAMINER: Teng, Sally P.
LEGAL REPRESENTATIVE: Brookes, A. Anders
NUMBER OF CLAIMS: 26
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 3 Drawing Figure(s); 10 Drawing Page(s)
LINE COUNT: 1776
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Human G-protein parathyroid hormone (PTH) receptor polypeptides and DNA (RNA) encoding such polypeptides and a procedure for producing such polypeptides by recombinant techniques is disclosed. Also disclosed are methods for utilizing such polypeptides for identifying antagonists and agonists to such polypeptides and methods of using the agonists and antagonists therapeutically to treat conditions related to the underexpression and overexpression of the PTH receptor receptor polypeptides. Also disclosed are diagnostic methods for detecting a mutation in the PTH receptor receptor nucleic acid sequences and detecting a level of the soluble form of the receptors in a sample derived from a host.

IT **260253-24-5**
(unclaimed protein sequence; polynucleotide encoding G-protein parathyroid hormone receptor HLTDG74, its cDNA sequence and use in recombinant prodn. of HLTDG74)

L86 ANSWER 36 OF 44 USPATFULL
ACCESSION NUMBER: 2000:12926 USPATFULL
TITLE: Compositions and methods for the treatment and diagnosis of cardiovascular disease using rchd523 as a target
INVENTOR(S): Falb, Dean A., Wellesley, MA, United States
Gimbrone, Jr., Michael A., Jamaica Plain, MA, United States
PATENT ASSIGNEE(S): Millennium Pharmaceuticals, Inc., Cambridge, MA, United States (U.S. corporation)
Brigham and Women's Hospital, Boston, MA, United States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 6020463		20000201
APPLICATION INFO.:	US 1997-944423		19971006 (8)

RELATED APPLN. INFO.: Division of Ser. No. US 1996-599654, filed on 9 Feb 1996, now patented, Pat. No. US 5882925 which is a continuation-in-part of Ser. No. US 1995-485573, filed on 7 Jun 1995, now patented, Pat. No. US 5968770 which is a continuation-in-part of Ser. No. US 1995-386844, filed on 10 Feb 1995
DOCUMENT TYPE: Utility
PRIMARY EXAMINER: Priebe, Scott D.
ASSISTANT EXAMINER: Nguyen, Daug Trong
LEGAL REPRESENTATIVE: Pennie & Edmonds LLP
NUMBER OF CLAIMS: 3
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 41 Drawing Figure(s); 53 Drawing Page(s)
LINE COUNT: 5972
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention relates to methods and compositions for the treatment and diagnosis of cardiovascular disease, including, but not limited to, atherosclerosis, ischemia/reperfusion, hypertension, restenosis, and arterial inflammation. Specifically, the present invention identifies and describes genes which are differentially expressed in cardiovascular disease states, relative to their expression in normal, or non-cardiovascular disease states, and/or in response to manipulations relevant to cardiovascular disease. Further, the present invention identifies and describes genes via the ability of their gene products to interact with gene products involved in cardiovascular disease. Still further, the present invention provides methods for the identification and therapeutic use of compounds as treatments of cardiovascular disease. Moreover, the present invention provides methods for the diagnostic monitoring of patients undergoing clinical evaluation for the treatment of cardiovascular disease, and for monitoring the efficacy of compounds in clinical trials. Additionally, the present invention describes methods for the diagnostic evaluation and prognosis of various cardiovascular diseases, and for the identification of subjects exhibiting a predisposition to such conditions.

IT **182016-73-5**, Protein (human gene RCHD523)
(amino acid sequence; compns. and methods based on differentially expressed genes for treatment and diagnosis of cardiovascular disease)

L86 ANSWER 37 OF 44 USPATFULL
ACCESSION NUMBER: 2000:10014 USPATFULL
TITLE: Compositions and methods for the treatment and diagnosis of cardiovascular disease using rchd528 as a target
INVENTOR(S): Falb, Dean A., Wellesley, MA, United States
Gimbrone, Jr., Michael A., Jamaica Plain, MA, United States
PATENT ASSIGNEE(S): Millenium Pharmaceuticals, Inc., Cambridge, MA, United States (U.S. corporation)
Brigham and Women's Hospital, Boston, MA, United States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 6018025		20000125
APPLICATION INFO.:	US 1997-944868		19971006 (8)

RELATED APPLN. INFO.: Division of Ser. No. US 1996-599654, filed on 9 Feb 1996, now patented, Pat. No. US 5882925 which is a

continuation-in-part of Ser. No. US 1995-485573, filed on 7 Jun 1995 which is a continuation-in-part of Ser. No. US 1995-386844, filed on 10 Feb 1995
DOCUMENT TYPE: Utility
PRIMARY EXAMINER: Priebe, Scott D.
ASSISTANT EXAMINER: Nguyen, Dave Trong
LEGAL REPRESENTATIVE: Pennie & Edmonds LLP
NUMBER OF CLAIMS: 5
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 41 Drawing Figure(s); 53 Drawing Page(s)
LINE COUNT: 6133
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The present invention relates to methods and compositions for the treatment and diagnosis of cardiovascular disease, including, but not limited to, atherosclerosis, ischemia/reperfusion, hypertension, restenosis, and arterial inflammation. Specifically, the present invention identifies and describes genes which are differentially expressed in cardiovascular disease states, relative to their expression in normal, or non-cardiovascular disease states, and/or in response to manipulations relevant to cardiovascular disease. Further, the present invention identifies and describes genes via the ability of their gene products to interact with gene products involved in cardiovascular disease. Still further, the present invention provides methods for the identification and therapeutic use of compounds as treatments of cardiovascular disease. Moreover, the present invention provides methods for the diagnostic monitoring of patients undergoing clinical evaluation for the treatment of cardiovascular disease, and for monitoring the efficacy of compounds in clinical trials. Additionally, the present invention describes methods for the diagnostic evaluation and prognosis of various cardiovascular diseases, and for the identification of subjects exhibiting a predisposition to such conditions.
IT **182016-73-5**, Protein (human gene RCHD523)
(amino acid sequence; compns. and methods based on differentially expressed genes for treatment and diagnosis of cardiovascular disease)

L86 ANSWER 38 OF 44 USPATFULL
ACCESSION NUMBER: 2000:9868 USPATFULL
TITLE: Template associated NPY Y2-receptor agonists
INVENTOR(S): Mutter, Manfred, Vaud, Switzerland
Lacroix, Jean-Silvain, Geneva, Switzerland
Grouzmann, Eric, Vaud, Switzerland
PATENT ASSIGNEE(S): B.M.R.A. Corporation B.V., Netherlands (non-U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 6017879		20000125
APPLICATION INFO.:	US 1998-54393		19980403 (9)

DOCUMENT TYPE: Utility
PRIMARY EXAMINER: Tsang, Cecilia J.
ASSISTANT EXAMINER: Gupta, Anish
LEGAL REPRESENTATIVE: Sanzo, Michael A.Vinson & Elkins L.L.P.
NUMBER OF CLAIMS: 13
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 16 Drawing Figure(s); 11 Drawing Page(s)
LINE COUNT: 1142
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The present invention is directed to agonists of neuropeptide Y (NPY) or PYY that are formed by combining these peptides or a portion of these peptides with a template that promotes biologically active folds. Typically, templates consist of cyclized peptides containing one or more

naphthyl ring structures. The agonists may be used in the treatment of diseases and conditions known to be responsive to NPY or PYY and, particularly in the treatment of asthma, rhinitis, and bronchitis.

IT **246863-93-4P 246863-94-5P**
(template assocd. NPY or PYY agonists that interact specifically with the Y2 receptor)

L86 ANSWER 39 OF 44 USPATFULL

ACCESSION NUMBER: 1999:155481 USPATFULL
TITLE: Polynucleotide encoding human **G-protein coupled receptor**
INVENTOR(S): Lal, Preeti, Santa Clara, CA, United States
Guegler, Karl J., Menlo Park, CA, United States
Shah, Purvi, Sunnyvale, CA, United States
Corley, Neil C., Mountian View, CA, United States
PATENT ASSIGNEE(S): Incyte Pharmaceuticals, Inc., Palo Alto, CA, United States (U.S. corporation)

	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 5994097		19991130	
APPLICATION INFO.:	US 1997-919624		19970828	(8)

DOCUMENT TYPE: Utility
PRIMARY EXAMINER: Mertz, Prema
LEGAL REPRESENTATIVE: Incyte Pharmaceuticals Inc.
NUMBER OF CLAIMS: 7
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 14 Drawing Figure(s); 14 Drawing Page(s)
LINE COUNT: 2384
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The invention provides a human **G-protein coupled receptor** (GRecH) and polynucleotides which identify and encode GRecH. The invention also provides expression vectors, host cells, **agonists**, antibodies and **antagonists**. The invention also provides methods for treating disorders associated with expression of GRecH.

IT **220973-87-5P**
(nucleotide sequence; cloning and cDNA sequence of a human G protein-coupled receptor)

L86 ANSWER 40 OF 44 USPATFULL

ACCESSION NUMBER: 1999:128386 USPATFULL
TITLE: Compositions and methods for the treatment and diagnosis of cardiovascular disease using rchd523 as a target
INVENTOR(S): Falb, Dean A., Wellesley, MA, United States
Gimbrone, Jr., Michael A., Jamaica Plain, MA, United States
PATENT ASSIGNEE(S): Millennium Pharmaceuticals, Inc., Cambridge, MA, United States (U.S. corporation)

	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 5968770		19991019	
APPLICATION INFO.:	US 1995-485573		19950607	(8)

RELATED APPLN. INFO.: Continuation-in-part of Ser. No. US 1995-386844, filed on 10 Feb 1995
DOCUMENT TYPE: Utility
PRIMARY EXAMINER: Low, Christopher S. F.
ASSISTANT EXAMINER: Nguyen, Dave Trong
LEGAL REPRESENTATIVE: Pennie & Edmonds LLP

NUMBER OF CLAIMS: 18
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 40 Drawing Figure(s); 40 Drawing Page(s)
LINE COUNT: 5019
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention relates to methods and compositions for the treatment and diagnosis of cardiovascular disease, including, but not limited to, atherosclerosis, ischemia/reperfusion, hypertension, restenosis, and arterial inflammation. Specifically, the present invention identifies and describes genes which are differentially expressed in cardiovascular disease states, relative to their expression in normal, or non-cardiovascular disease states, and/or in response to manipulations relevant to cardiovascular disease. Further, the present invention identifies and describes genes via the ability of their gene products to interact with gene products involved in cardiovascular disease. Still further, the present invention provides methods for the identification and therapeutic use of compounds as treatments of cardiovascular disease. Moreover, the present invention provides methods for the diagnostic monitoring of patients undergoing clinical evaluation for the treatment of cardiovascular disease, and for monitoring the efficacy of compounds in clinical trials. Additionally, the present invention describes methods for the diagnostic evaluation and prognosis of various cardiovascular diseases, and for the identification of subjects exhibiting a predisposition to such conditions.

IT **182016-73-5**, Membrane protein (human gene RCHD523)
(amino acid sequence; treatment and diagnosis of cardiovascular disease using human rchd523 as target for expression induction with sheer stress)

L86 ANSWER 41 OF 44 USPATFULL
ACCESSION NUMBER: 1999:33831 USPATFULL
TITLE: Compositions and method for the treatment and diagnosis of cardiovascular disease using rchd502 as a target
INVENTOR(S): Falb, Dean A., Wellesley, MA, United States
PATENT ASSIGNEE(S): Millennium Pharmaceuticals, Inc., Cambridge, MA, United States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 5882925		19990316
APPLICATION INFO.:	US 1996-599654		19960209 (8)

RELATED APPLN. INFO.: Continuation-in-part of Ser. No. US 1995-485573, filed on 7 Jun 1995 which is a continuation-in-part of Ser. No. US 1995-386844, filed on 10 Feb 1995
DOCUMENT TYPE: Utility
PRIMARY EXAMINER: Low, Christopher S.F.
ASSISTANT EXAMINER: Nguyen, Dave Trong
LEGAL REPRESENTATIVE: Pennie & Edmonds LLP
NUMBER OF CLAIMS: 22
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 53 Drawing Figure(s); 53 Drawing Page(s)
LINE COUNT: 5758
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention relates to methods and compositions for the treatment and diagnosis of cardiovascular disease, including, but not limited to, atherosclerosis, ischemia/reperfusion, hypertension, restenosis, and arterial inflammation. Specifically, the present invention identifies and describes genes which are differentially expressed in cardiovascular disease states, relative to their expression in normal, or non-cardiovascular disease states, and/or in response to manipulations relevant to cardiovascular disease. Further, the present

invention identifies and describes genes via the ability of their gene products to interact with gene products involved in cardiovascular disease. Still further, the present invention provides methods for the identification and therapeutic use of compounds as treatments of cardiovascular disease. Moreover, the present invention provides methods for the diagnostic monitoring of patients undergoing clinical evaluation for the treatment of cardiovascular disease, and for monitoring the efficacy of compounds in clinical trials. Additionally, the present invention describes methods for the diagnostic evaluation and prognosis of various cardiovascular diseases, and for the identification of subjects exhibiting a predisposition to such conditions.

IT **182016-73-5P**, Protein (human gene RCHD523)
(amino acid sequence; cardiovascular disease-related protein rchd502 and cDNA and its expression in recombinant cells)

L86 ANSWER 42 OF 44 USPATFULL

ACCESSION NUMBER: 1998:157185 USPATFULL
TITLE: Compositions and methods for the treatment and diagnosis of cardiovascular using RCHD528 as a target
INVENTOR(S): Falb, Dean A., Massachusetts, MA, United States
PATENT ASSIGNEE(S): Millennium Pharmaceuticals, Inc., Cambridge, MA, United States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 5849578		19981215
APPLICATION INFO.:	US 1996-616844		19960315 (8)

RELATED APPLN. INFO.: Division of Ser. No. US 1996-599654, filed on 9 Feb 1996 which is a continuation-in-part of Ser. No. US 1995-458873, filed on 7 Jun 1995 which is a continuation-in-part of Ser. No. US 1995-386844, filed on 10 Feb 1995
DOCUMENT TYPE: Utility
PRIMARY EXAMINER: Low, Christopher S. F.
ASSISTANT EXAMINER: Nguyen, Dave Trong
LEGAL REPRESENTATIVE: Pennie & Edmonds
NUMBER OF CLAIMS: 21
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 53 Drawing Figure(s); 53 Drawing Page(s)
LINE COUNT: 5753
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention relates to methods and compositions for the treatment and diagnosis of cardiovascular disease, including, but not limited to, atherosclerosis, ischemia/reperfusion, hypertension, restenosis, and arterial inflammation. Specifically, the present invention identifies and describes genes which are differentially expressed in cardiovascular disease states, relative to their expression in normal, or non-cardiovascular disease states, and/or in response to manipulations relevant to cardiovascular disease. Further, the present invention identifies and describes genes via the ability of their gene products to interact with gene products involved in cardiovascular disease. Still further, the present invention provides methods for the identification and therapeutic use of compounds as treatments of cardiovascular disease. Moreover, the present invention provides methods for the diagnostic monitoring of patients undergoing clinical evaluation for the treatment of cardiovascular disease, and for monitoring the efficacy of compounds in clinical trials. Additionally, the present invention describes methods for the diagnostic evaluation and prognosis of various cardiovascular diseases, and for the identification of subjects exhibiting a predisposition to such conditions.

IT **182016-73-5**, Protein (human gene RCHD523)

(amino acid sequence; compns. and methods based on differentially expressed genes for treatment and diagnosis of cardiovascular disease)

L86 ANSWER 43 OF 44 USPATFULL
ACCESSION NUMBER: 1998:138691 USPATFULL
TITLE: Compositions and methods using rchd534, a gene uregulated by shear stress
INVENTOR(S): Falb, Dean, Wellesley, MA, United States
PATENT ASSIGNEE(S): Millennium Pharmaceuticals Inc., Cambridge, MA, United States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 5834248		19981110
APPLICATION INFO.:	US 1995-480994		19950607 (8)

RELATED APPLN. INFO.: Division of Ser. No. US 1995-485573, filed on 7 Jun 1995 And a continuation-in-part of Ser. No. US 1995-386844, filed on 10 Feb 1995
DOCUMENT TYPE: Utility
PRIMARY EXAMINER: Chambers, Jasemine C.
ASSISTANT EXAMINER: Clark, Deborah J. R.
LEGAL REPRESENTATIVE: Pennie & Edmonds LLP
NUMBER OF CLAIMS: 17
EXEMPLARY CLAIM: 1,11,12,15
NUMBER OF DRAWINGS: 40 Drawing Figure(s); 40 Drawing Page(s)
LINE COUNT: 4877
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention relates to methods and compositions for the treatment and diagnosis of cardiovascular disease, including, but not limited to, atherosclerosis, ischemia/reperfusion, hypertension, restenosis, and arterial inflammation. Specifically, the present invention identifies and describes genes which are differentially expressed in cardiovascular disease states, relative to their expression in normal, or non-cardiovascular disease states, and/or in response to manipulations relevant to cardiovascular disease. Further, the present invention identifies and describes genes via the ability of their gene products to interact with gene products involved in cardiovascular disease. Still further, the present invention provides methods for the identification and therapeutic use of compounds as treatments of cardiovascular disease. Moreover, the present invention provides methods for the diagnostic monitoring of patients undergoing clinical evaluation for the treatment of cardiovascular disease, and for monitoring the efficacy of compounds in clinical trials. Additionally, the present invention describes methods for the diagnostic evaluation and prognosis of various cardiovascular diseases, and for the identification of subjects exhibiting a predisposition to such conditions.

IT **182016-73-5**, Protein (human gene RCHD523)
(amino acid sequence; compns. and methods based on differentially expressed genes for treatment and diagnosis of cardiovascular disease)

L86 ANSWER 44 OF 44 USPATFULL
ACCESSION NUMBER: 95:45531 USPATFULL
TITLE: Cloned cell line expressing rat .beta..sub.3A adrenergic receptor
INVENTOR(S): Venter, J. Craig, Silver Spring, MD, United States
Fraser, Claire M., Silver Spring, MD, United States
Giacobino, Jean-Paul, Geneva, Switzerland
PATENT ASSIGNEE(S): The United States as represented by the Secretary of the Department of Health and Human Services, Washington, DC, United States (U.S. government)

	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 5418160		19950523	
APPLICATION INFO.:	US 1991-783602		19911101	(7)

DOCUMENT TYPE: Utility
PRIMARY EXAMINER: Parr, Margaret
ASSISTANT EXAMINER: Horlick, Kenneth R.
LEGAL REPRESENTATIVE: Lowe, Price, LeBlanc & Becker
NUMBER OF CLAIMS: 1
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 11 Drawing Figure(s); 9 Drawing Page(s)
LINE COUNT: 471
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention relates to a fat cell specific rat .beta.-adrenergic receptor that mediates lipolysis in rats. The invention further relates to cloned cells which code for the specific .beta.-adrenergic receptor that mediates lipolysis. Another aspect of the present invention relates to a diagnostic test method for determining decreased levels of fat cell .beta.-adrenergic receptors that mediate lipotysis in order to diagnosis obesity caused by less active lipolysis.

IT **143198-52-1**
(amino acid sequence of)

FILE 'HOME' ENTERED AT 16:13:39 ON 02 JUL 2001